

BOREHOLE LOG: GP-01

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PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 30
DEPTH OF SOIL DRILL: 30
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473727.34 E: 4685895.89
GROUND SURFACE ELEV.: 1052.82
DATUM: N/A
START DATE/TIME: 11/20/2010 7:40:00 AM
END DATE/TIME: 11/20/2010 9:45:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %				
1050.0	GRAVEL FILL Soft, light olive to dark gray, CLAY with trace Sand.		S1	DPT	0.0	40 / 60		0.0-0.25 ft-bgs: GRAVEL FILL. 0.25-4.0 ft-bgs: Soft, dark gray (N3), CLAY, trace fine Sand, damp [CL]. 4.0-5.0 ft-bgs: Soft, light olive gray (5Y 6/1), CLAY, trace fine to coarse Sand, damp [CL].		Well Not Installed
1045.0	Stiff to soft, light olive to dark gray, SANDY CLAY.		S2	DPT	0.0	44 / 60		5.0-5.75 ft-bgs: Loose, light olive gray (5Y 6/1), CLAYEY SAND, fine to coarse Sand, wet [SP]. 5.75-8.0 ft-bgs: Soft, light olive gray (5Y 6/1), SANDY CLAY with trace iron staining, moist-wet [CL]. 7.0 ft-bgs - Sample is damp (less moisture than above and below). 8.0-8.1 ft-bgs: fine to coarse SAND. 8.1-10.0 ft-bgs: Soft, light olive gray (5Y 6/1), SANDY CLAY with trace iron staining, moist-wet [CL].		
1040.0	SAND LENS Stiff to soft, light olive to dark gray, SANDY CLAY.		S3	DPT	0.0	30 / 60		10.0-11.0 ft-bgs: Loose, light olive gray (5Y 6/1), CLAYEY SAND, fine to coarse Sand, wet [SP]. 11.0-15.0 ft-bgs: Stiff, olive gray (5Y 4/1) SANDY CLAY, trace silt and trace carbon staining, wet [CL].		
1035.0			S4	DPT	0.0	41 / 60		15.0-18.0 ft-bgs: Stiff, medium to dark gray (N4), SANDY CLAY with little fine to coarse Sand and trace fine Gravel, wet [CL]. 18.0-20.0 ft-bgs: Soft, medium to dark gray (N4), SANDY CLAY with little fine to coarse Sand and trace fine Gravel, wet [CL].		
1030.0			S5	DPT	0.0	365 / 60		20.0-25.0 ft-bgs: Soft, medium to dark gray (N4), SANDY CLAY with little fine to coarse Sand and trace fine Gravel, wet [CL].		

LITHOLOGY LEGEND



Fill (made ground)
USCS Poorly-graded Sand (SP)



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 1/20/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011



RCRA



555466


BOREHOLE LOG: GP-01

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 30
DEPTH OF SOIL DRILL: 30
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473727.34 E: 4685895.89
GROUND SURFACE ELEV.: 1052.82
DATUM: N/A
START DATE/TIME: 11/20/2010 7:40:00 AM
END DATE/TIME: 11/20/2010 9:45:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1025.0	Stiff to soft, light olive to dark gray, SANDY CLAY.		S6	DPT	0.0	40 / 60	25.0-30.0 ft-bgs: Soft, medium to dark gray (N4), SANDY CLAY with little fine to coarse Sand and trace fine Gravel, wet [CL].			
1020.0										
1015.0										
1010.0										
1005.0										

LITHOLOGY LEGEND



Fill (made ground)
USCS Poorly-graded Sand
(SP)



USCS Low Plasticity Clay
(CL)



USCS Low Plasticity Sandy
Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary
GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 1/20/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011




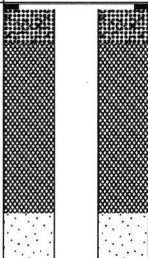

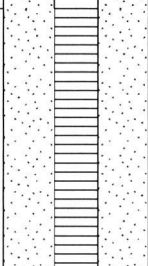
BOREHOLE LOG: MW-01/GP-02

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PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 10
DEPTH OF SOIL DRILL: 10
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473727.53 E: 4685877.23
GROUND SURFACE ELEV.: 1052.8
DATUM: N/A
START DATE/TIME: 11/20/2010 10:00:00 AM
END DATE/TIME: 11/20/2010 10:25:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1050.0	GRAVEL FILL Soft, dusky yellow to dark gray, CLAY with trace Sand.		S1	DPT	0.0	40 / 60	0.0-0.25 ft-bgs: GRAVEL FILL. 0.25-3.5 ft-bgs: Soft, dark gray (N3), CLAY, trace fine Sand, damp [CL]. 3.5-5.0 ft-bgs: Soft, yellow (5Y 5/4) with mottling, CLAY and fine to medium SAND, moist [SC/CL].		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Cement seal. 0.75-4.0 ft-bgs: Bentonite chips. 4.0-10.0 ft-bgs: Filter sand pack (20/40 sand).	
1045.0	Stiff to soft, light olive gray, SANDY CLAY with iron and organic staining. Loose CLAYEY SAND LENS Stiff to soft, light olive gray, SANDY CLAY with iron and organic staining.		S2	DPT	0.0	50 / 60	5.0-6.25 ft-bgs: Soft, light olive gray (5Y 6/1), fine SANDY CLAY with trace iron and organic staining, moist [CL]. 6.25-6.35 ft-bgs: Loose, light olive gray (5Y 6/1), fine to coarse CLAYEY SAND, wet [SP]. 6.35-10.0 ft-bgs: Soft, light olive gray (5Y 6/1), fine SANDY CLAY with trace iron and organic staining, moist [CL].		5.0-10.0 ft-bgs: 1.5-inch pre-packed PVC well screen.	
1040.0										
1035.0										
1030.0										

LITHOLOGY LEGEND



Fill (made ground)
USCS Poorly-graded Sand (SP)



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 1/20/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011



BOREHOLE LOG: MW-02/GP-03

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 35
DEPTH OF SOIL DRILL: 35
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473471.97 E: 4685903.39
GROUND SURFACE ELEV.: 1050.81
DATUM: N/A
START DATE/TIME: 11/20/2010 10:45:00 AM
END DATE/TIME: 11/20/2010 12:15:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %				
1050.0	GRAVEL FILL Soft, dark gray, CLAY with trace Sand.		S1	DPT	0.0	38 / 60	0.0-0.25 ft-bgs: GRAVEL FILL. 0.25-4.0 ft-bgs: Soft, dark gray (N3), CLAY, trace fine Sand, damp [CL]. 4.0-5.0 ft-bgs: Very soft, light olive gray (5Y 6/1), SANDY CLAY with some Silt and trace iron and organic staining, moist [CL].		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Cement seal. 0.75-4.0 ft-bgs: Bentonite chips. 4.0-10.0 ft-bgs: Filter sand pack (20/40 sand). 5.0-10.0 ft-bgs: 1.5-inch pre-packed PVC well screen.	
1045.0	Very soft to stiff, light olive gray to medium dark gray, SANDY CLAY with iron and organic staining.		S2	DPT	0.0	32 / 60	5.0-6.0 ft-bgs: Very soft, light olive gray (5Y 6/1), SANDY CLAY with some Silt and trace iron and organic staining, moist [CL]. 6.0-10.0 ft-bgs: Very soft, light olive gray (5Y 6/1), SANDY CLAY with some Silt and some iron staining, moist [CL].			
1040.0			S3	DPT	0.0	16 / 60	10.0-11.0 ft-bgs: Very soft, light olive gray (5Y 6/1), SANDY CLAY with some Silt and some iron staining, moist [CL]. 11.0-15.0 ft-bgs: Very soft, olive gray (5Y 5/4), SANDY CLAY with trace iron staining, damp [CL].			
1035.0			S4	DPT	0.0	12 / 60	15.0-20.0 ft-bgs: Stiff, medium to dark gray (N4), SANDY CLAY with little fine to coarse Sand and trace iron staining, moist [CL].			
1030.0			S5	DPT	0.0	24 / 60	20.0-22.0 ft-bgs: Stiff, medium to dark gray (N4), SANDY CLAY with little fine to coarse Sand and trace iron staining, moist [CL]. 22.0-25.0 ft-bgs: Stiff, medium to dark gray (N4), SANDY CLAY with little fine to coarse Sand, trace Gravel, and trace iron staining, moist [CL].			

LITHOLOGY LEGEND



Fill (made ground)
USCS Poorly-graded Sand (SP)



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 1/20/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011



BOREHOLE LOG: MW-02/GP-03

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PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 35
DEPTH OF SOIL DRILL: 35
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473471.97 E: 4685903.39
GROUND SURFACE ELEV.: 1050.81
DATUM: N/A
START DATE/TIME: 11/20/2010 10:45:00 AM
END DATE/TIME: 11/20/2010 12:15:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1025.0	Very soft to stiff, light olive gray to medium dark gray, SANDY CLAY with iron and organic staining.		S6	DPT	0.0	55 / 60	25.0-29.0 ft-bgs: Stiff, medium to dark gray (N4), SANDY CLAY with little fine to coarse Sand, trace Gravel, and trace iron staining, moist [CL]. 29.0-29.5 ft-bgs: Very soft, medium to dark gray (N4), SANDY CLAY with little fine to coarse Sand, trace Gravel, and trace iron staining, moist [CL]. 29.5-30.0 ft-bgs: Stiff, medium to dark gray (N4), SANDY CLAY with little fine to coarse Sand, trace Gravel, and trace iron staining, moist [CL].		
1020.0			S7	DPT	0.0	36 / 60	30.0-34.7 ft-bgs: Hard, medium to dark gray (N4), SANDY CLAY with little fine to coarse Sand, trace Gravel, and trace iron staining, dry [CL]. 34.7-34.9 ft-bgs: loose, light olive gray (5Y 5/6), medium SAND, dry [SP]. 34.9-35.0 ft-bgs: Hard, dark greenish gray (5GY 4/1), CLAY and SILT with little fine to coarse Sand, trace fine Gravel, dry [CL].		
	Loose SAND LENS								
1015.0	Very soft to stiff, light olive gray to medium dark gray, SANDY CLAY with iron and organic staining.								
1010.0									
1005.0									

LITHOLOGY LEGEND



Fill (made ground)
USCS Poorly-graded Sand (SP)



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 1/20/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011



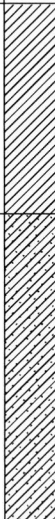
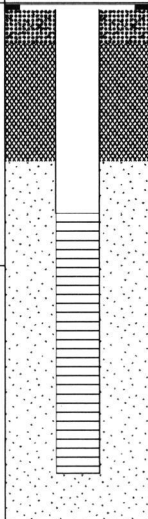
BOREHOLE LOG: MW-03/GP-04

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PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 10
DEPTH OF SOIL DRILL: 10
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473712.19 E: 4685345.59
GROUND SURFACE ELEV.: 1050.94
DATUM: N/A
START DATE/TIME: 11/20/2010 1:35:00 PM
END DATE/TIME: 11/20/2010 1:45:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1050.0	Soft, dark to olive gray, CLAY with trace Sand.		S1	DPT	0.0	42 / 60	0.0-2.5 ft-bgs: Soft, dark gray (N3), CLAY, trace fine Sand, damp [CL]. 2.5-4.0 ft-bgs: Soft, light olive gray (5Y 6/1), CLAY, trace fine Sand, damp [CL]. 4.0-5.0 ft-bgs: Soft, light olive gray (5Y 6/1), SANDY CLAY with some Silt, trace iron and organic staining, moist [CL].		<p>Steel flush mount with locking cap.</p> <p>0.0-0.75 ft-bgs: Cement seal.</p> <p>0.75-3.0 ft-bgs: Bentonite chips.</p> <p>3.0-10.0 ft-bgs: Filter sand pack (20/40 sand).</p> <p>4.0-9.0 ft-bgs: 1.5-inch pre-packed PVC well screen.</p>	
1045.0	Soft to stiff, light olive gray, SANDY CLAY with iron and organic staining.						S2			DPT
1040.0										
1035.0										
1030.0										

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 1/20/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011



BOREHOLE LOG: MW-04/GP-05

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 10
DEPTH OF SOIL DRILL: 10
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473471.13 E: 4685362.38
GROUND SURFACE ELEV.: 1049.9
DATUM: N/A
START DATE/TIME: 11/20/2010 2:05:00 PM
END DATE/TIME: 11/20/2010 2:15:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1045.0	Soft, dark to olive gray, CLAY with trace Sand.		S1	DPT	0.0	45 / 60	0.0-3.5 ft-bgs: Soft, dark gray (N3), CLAY, trace fine Sand, damp [CL]. 3.5-4.0 ft-bgs: Very soft, light olive gray (5Y 6/1), CLAY, trace fine Sand, moist [CL]. 4.0-5.0 ft-bgs: Soft, light olive gray (5Y 6/1), fine to medium SANDY CLAY with some Silt, trace iron and organic staining, moist [CL].		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Cement seal. 0.75-3.0 ft-bgs: Bentonite chips. 3.0-10.0 ft-bgs: Filter sand pack (20/40 sand). 4.0-9.0 ft-bgs: 1.5-inch pre-packed PVC well screen.	
	Soft, light olive gray, SANDY CLAY with iron and organic staining. SAND LENS Soft, light olive gray, SANDY CLAY with iron and organic staining.									S2
1040.0										
1035.0										
1030.0										
1025.0										

LITHOLOGY LEGEND



USCS Low Plasticity Clay
(CL)



USCS Low Plasticity Sandy
Clay (CLS)



USCS Poorly-graded Sand
(SP)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 1/20/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011




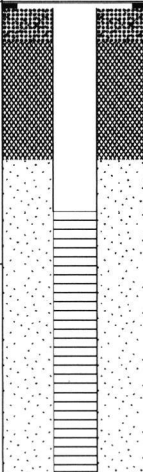

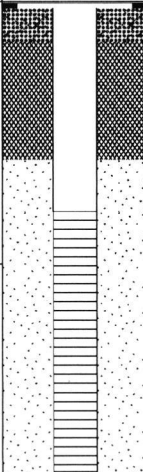
BOREHOLE LOG: MW-05/GP-06

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 10
DEPTH OF SOIL DRILL: 10
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473144.28 E: 4685429.86
GROUND SURFACE ELEV.: 1051.53
DATUM: N/A
START DATE/TIME: 11/20/2010 2:35:00 PM
END DATE/TIME: 11/20/2010 2:45:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %				
1050.0	Soft, dark to olive gray, CLAY with trace Sand.		S1	DPT	0.0	36 / 60	0.0-1.5 ft-bgs: Firm, dark gray (N3), CLAY, trace fine Sand, damp [CL]. 1.5-2.5 ft-bgs: Firm, light olive gray (5Y 6/1), fine to medium SANDY CLAY with some Silt, damp [CL]. 2.5-4.75 ft-bgs: Firm, light olive gray (5Y 6/1), fine to medium SANDY CLAY with some Silt, trace iron and organic staining, damp [CL]. 4.75-5.0 ft-bgs: Soft, light olive gray (5Y 6/1), fine to medium SANDY CLAY with some Silt, trace iron and organic staining, moist [CL].		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Cement seal. 0.75-3.0 ft-bgs: Bentonite chips. 3.0-10.0 ft-bgs: Filter sand pack (20/40 sand). 4.0-9.0 ft-bgs: 1.5-inch pre-packed PVC well screen.	
	Soft to firm, light olive gray, SANDY CLAY with iron and organic staining.									
1045.0	SAND LENS		S2	DPT	0.0	44 / 60	5.0-5.5 ft-bgs: Loose, medium yellow brown (10 YR 4/2), fine to coarse SAND, trace Gravel, wet [SP]. 5.5-6.5 ft-bgs: Soft, light olive gray (5Y 6/1), fine to coarse SANDY CLAY with some Silt, moist [CL]. 6.5-6.6 ft-bgs: Fine to coarse SAND lens. 6.6-8.0 ft-bgs: Soft, light olive gray (5Y 6/1), fine to coarse SANDY CLAY with some Silt, moist [CL]. 8.0-10.0 ft-bgs: Firm, light olive gray (5Y 6/1), fine to coarse SANDY CLAY with some Silt, moist-damp [CL].			
	Soft to firm, light olive gray, SANDY CLAY with iron and organic staining.									
1040.0										
1035.0										
1030.0										

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLS)



USCS Poorly-graded Sand (SP)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 1/20/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011








BOREHOLE LOG: MW-06/GP-07

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 10
DEPTH OF SOIL DRILL: 10
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473155.05 E: 4685603.48
GROUND SURFACE ELEV.: 1049.44
DATUM: N/A
START DATE/TIME: 11/20/2010 3:00:00 PM
END DATE/TIME: 11/20/2010 3:15:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1045.0	GRAVEL FILL		S1	DPT	0.0	55 / 60	0.0-0.5 ft-bgs: GRAVEL FILL.		Steel flush mount with locking cap.	
	0.5-1.0 ft-bgs: Hard, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, trace iron and organic staining, dry-damp [CL].									
1040.0	Hard to soft, light olive gray, SANDY CLAY with iron and organic staining.		S2	DPT	0.0	55 / 60	1.0-4.75 ft-bgs: Soft, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, trace iron and organic staining, moist [CL].		0.0-0.75 ft-bgs: Cement seal.	
	4.75-5.0 ft-bgs: Firm, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, trace iron and organic staining, moist [CL].									
							5.0-6.0 ft-bgs: Firm, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, trace iron and organic staining, moist [CL].		4.0-10.0 ft-bgs: Filter sand pack (20/40 sand).	
	6.0-7.5 ft-bgs: Soft, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, trace iron and organic staining, moist [CL].									
							7.5-7.8 ft-bgs: Very soft, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, trace iron and organic staining, moist-wet [CL].		5.0-10.0 ft-bgs: 1.5-inch pre-packed PVC well screen.	
	7.8-8.5 ft-bgs: Soft, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, trace iron and organic staining, moist [CL].									
							8.5-10.0 ft-bgs: Stiff, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, trace iron and organic staining, moist [CL].			
1035.0										
1030.0										
1025.0										

LITHOLOGY LEGEND



Fill (made ground)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 1/20/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011







BOREHOLE LOG: MW-07/GP-08

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 15
DEPTH OF SOIL DRILL: 15
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473151.23 E: 4685908.05
GROUND SURFACE ELEV.: 1049.64
DATUM: N/A
START DATE/TIME: 11/20/2010 3:30:00 PM
END DATE/TIME: 11/20/2010 3:45:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information					
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %									
1045.0	Soft to firm, dark gray, CLAY with trace Sand.		S1	DPT	0.0	36 / 60	0.0-1.5 ft-bgs: Soft, dark gray (N3), CLAY with trace fine Sand, damp [CL]. 1.5-4.5 ft-bgs: Stiff-very stiff, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, damp [CL]. 4.5-5.0 ft-bgs: Stiff-very stiff, medium light gray (N6), fine SANDY CLAY with some Silt, damp [CL].			Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Cement seal. 0.75-9.0 ft-bgs: Bentonite chips.					
	1040.0										S2	DPT	0.0	55 / 60	5.0-5.25 ft-bgs: Stiff-very stiff, medium light gray (N6), fine SANDY CLAY with some Silt, damp [CL]. 5.25-8.0 ft-bgs: Soft, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, little iron staining and trace organic staining, damp [CL]. 8.0-10.0 ft-bgs: Soft, light olive gray (5Y 6/1), fine to coarse SANDY CLAY with some Silt, little iron staining and trace organic staining, damp [CL].
	1035.0										S3	DPT	0.0	54 / 60	10.0-11.0 ft-bgs: Soft, light olive gray (5Y 6/1), fine to coarse SANDY CLAY with some Silt, little iron staining and trace organic staining, damp [CL]. 11.0-14.5 ft-bgs: Very stiff, medium gray (N5), fine to coarse SANDY CLAY with some Silt, little iron staining and trace organic staining, damp [CL]. 14.5-14.75 ft-bgs: Loose, medium yellow brown (10YR 5/4), fine to medium SAND, moist-wet [SP]. 14.75-15.0 ft-bgs: Very stiff, medium dark gray (N4), fine to coarse SANDY CLAY with some Silt, little iron staining and trace organic staining, damp [CL].
	SAND LENS Soft to very stiff, dark gray, SANDY CLAY with iron and organic staining.									9.0-15.0 ft-bgs: Filter sand pack (20/40 sand). 10.0-15.0 ft-bgs: 1.5-inch pre-packed PVC well screen.					
1030.0															
1025.0															

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLs)



USCS Poorly-graded Sand (SP)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 1/20/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011







BOREHOLE LOG: MW-08/GP-09

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 10
DEPTH OF SOIL DRILL: 10
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473628.35 E: 4685640.81
GROUND SURFACE ELEV.: 1049.61
DATUM: N/A
START DATE/TIME: 11/21/2010 7:45:00 AM
END DATE/TIME: 11/21/2010 8:00:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1045.0	Soft, dark gray, CLAY with trace Sand.		S1	DPT	0.0	45 / 60	0.0-1.0 ft-bgs: Soft, dark gray (N3), CLAY with trace fine Sand, damp [CL].			
	1.0-4.0 ft-bgs: Very soft, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, trace iron and organic staining, moist [CL].									
1040.0	Very soft to stiff, light to medium olive gray, SANDY CLAY with iron and organic staining.		S1	DPT	0.0	45 / 60	4.0-4.5 ft-bgs: Very soft, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, little iron and trace organic staining, moist [CL].			
	4.5-4.7 ft-bgs: Fine to coarse SAND, moist-wet.									
1045.0	SAND LENS Very soft to stiff, light to medium olive gray, SANDY CLAY with iron and organic staining.		S2	DPT	0.0	55 / 60	4.7-5.0 ft-bgs: Very soft, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, little iron and trace organic staining, moist [CL].			
	5.0-6.0 ft-bgs: Very soft, light olive gray (5Y 6/1), fine SANDY CLAY with some Silt, little iron and trace organic staining, moist [CL].									
1040.0			S2	DPT	0.0	55 / 60	6.0-9.5 ft-bgs: Soft, light olive gray (5Y 6/1), fine to coarse SANDY CLAY with some Silt, little iron and trace organic staining, moist [CL].			
	9.5-10.0 ft-bgs: Stiff, medium gray (N5), fine to coarse SANDY CLAY with some Silt, some iron and trace organic staining, damp [CL].									
1035.0										
1030.0										
1025.0										

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLS)



USCS Poorly-graded Sand (SP)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 1/20/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011



BOREHOLE LOG: MW-09/GP-10

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 20
DEPTH OF SOIL DRILL: 20
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473180.95 E: 4685490.47
GROUND SURFACE ELEV.: 1049.39
DATUM: N/A
START DATE/TIME: 11/21/2010 9:05:00 AM
END DATE/TIME: 11/21/2010 9:40:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1045.0 <										

LITHOLOGY LEGEND



Fill (made ground)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary
GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 1/20/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011




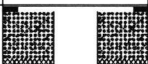

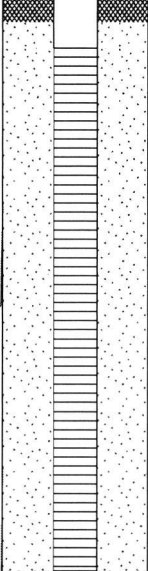

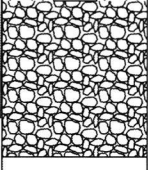



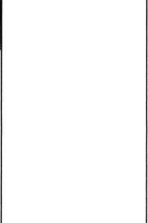
BOREHOLE LOG: MW-10

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 15
DEPTH OF SOIL DRILL: 15
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473208.66 E: 4685430.75
GROUND SURFACE ELEV.: 1049.24
DATUM: N/A
START DATE/TIME: 3/29/2011 8:45:00 AM
END DATE/TIME: 3/29/2011 11:05:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1045.0	Concrete		1	DPT	0.6	48 / 54	0.5-1.0 ft-bgs: Firm, dark gray (N3), CLAY, trace fine Sand, damp.		Steel flush mount with locking cap. 0.0-1.0 ft-bgs: Concrete seal.	
	Firm, dark gray (N3), CLAY, trace fine Sand, damp.						1.0-2.5 ft-bgs: Soft, light olive gray (5Y 5/2), fine SANDY CLAY, some Silt, trace iron and organic staining, damp-moist.			
	Very soft to stiff, light olive gray (5Y 5/2) to medium yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, trace iron and organic staining, moist.						2.5-3.0 ft-bgs: Soft, light olive gray (5Y 5/2), fine SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, damp-moist.			
							3.0-4.0 ft-bgs: Very soft, light olive gray (5Y 5/2), fine SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, moist.			
							4.0-5.0 ft-bgs: Soft, moderate yellow brown (10YR 5/4), fine to medium SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, damp.			
							5.0-5.5 ft-bgs: Soft, moderate yellow brown (10YR 5/4), fine to medium SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, damp.			
							5.5-7.0 ft-bgs: Very soft, moderate yellow brown (10YR 5/4), fine to medium SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, moist.			
							7.0-9.0 ft-bgs: Soft-firm, moderate yellow brown (10YR 5/4), fine to medium SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, damp.			
							9.0-10.0 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine to medium SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, damp.			
							10.0-12.0 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine to medium SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, damp.			
1040.0			2	DPT	1.7	54 / 60	12.0-14.5 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine to medium SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, damp.		1.0-1.5 ft-bgs: Granular Bentonite. 1.5-12.0 ft-bgs: Clean, fine to coarse sand filter. 2.0-12.0 ft-bgs: 1.5-inch pre-packed PVC well screen with filter (20/40 sand).	
							14.5-15.0 ft-bgs: Stiff, medium dark gray (N4), fine to medium SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, damp.			
1035.0			3	DPT	1.4	32 / 60			12.0-15.0 ft-bgs: Collapsed hole.	
1030.0					1.0					
1025.0										

LITHOLOGY LEGEND



Concrete



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011




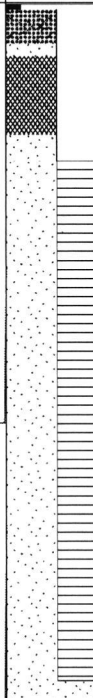
BOREHOLE LOG: MW-11

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13.5
DEPTH OF SOIL DRILL: 13.5
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473158.1 E: 4685534.48
GROUND SURFACE ELEV.: 1049.79
DATUM: N/A
START DATE/TIME: 3/29/2011 11:15:00 AM
END DATE/TIME: 3/29/2011 12:10:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1045.0	Firm, dark yellow brown (10YR 4/2), CLAY and GRAVEL, moist. [FILL]		1	DPT	1.7	58 / 60	0.0-1.0 ft-bgs: Firm, dark yellow brown (10YR 4/2), CLAY and GRAVEL, moist. [FILL]		Steel flush mount with locking cap.	
	firm to stiff, medium yellow brown (10YR 5/4) to medium dark gray (N4), fine SANDY CLAY, some Silt, some iron and organic staining, damp-moist.	1.4			1.0-2.5 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, some iron and organic staining, damp-moist.		0.0-0.75 ft-bgs: Concrete seal.			
	1040.0			2	DPT	2.1	50 / 60		2.5-3.5 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, iron and organic staining, little light gray (N7) mottling, damp-moist.	0.75-1.0 ft-bgs: Clean, fine to coarse sand.
			1.3			3.5-4.0 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, iron and organic staining, little light gray (N7) mottling, damp-moist.		1.0-2.5 ft-bgs: Granular Bentonite.		
			3	DPT	2.0	42 / 42	4.0-5.0 ft-bgs: Soft, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, iron and organic staining, little light gray (N7) mottling, moist.	2.5-13.5 ft-bgs: Clean, fine to coarse sand filter.		
							5.0-7.0 ft-bgs: Soft, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, iron and organic staining, little light gray (N7) mottling, moist.	3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen with filter (20/40 sand).		
1035.0							7.0-7.5 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, little light gray (N7) mottling, damp.		13.0-13.5 ft-bgs: Collapsed hole.	
							7.5-10.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, damp.			
							10.0-12.5 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, trace fine Gravel, iron and organic staining, damp.			
							12.5-13.5 ft-bgs: Stiff, medium dark gray (N4), fine to medium SANDY CLAY, some Silt, little iron and organic staining, damp.			
1030.0										
1025.0										

LITHOLOGY LEGEND



Fill (made ground)



USCS Low Plasticity Sandy Clay (CLS)

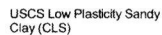
DRILLING COMPANY: Matrix Environmental
DRILLER: Gary
GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011



PAGE 1 of 1

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

LITHOLOGY LEGEND

**Golder
Associates**


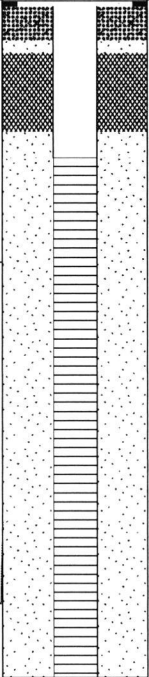
BOREHOLE LOG: MW-13

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473150.08 E: 4685780.62
GROUND SURFACE ELEV.: 1048.55
DATUM: N/A
START DATE/TIME: 3/29/2011 2:00:00 PM
END DATE/TIME: 3/29/2011 2:50:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Alt. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0	Concrete Soft to stiff, medium yellow brown (10YR 5/4) to medium dark gray (N4), SANDY CLAY, some Silt, little iron and organic staining, trace light gray (N7) mottling, moist.		1	DPT	1.1 1.7	55 / 60	0.0-0.4 ft-bgs: Concrete 0.4-2.5 ft-bgs: Soft, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, little iron and organic staining, trace light gray (N7) mottling, moist. 2.5-5.0 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, some iron and organic staining, little light gray (N7) mottling, moist.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-1.0 ft-bgs: Clean, fine to coarse sand. 1.0-2.5 ft-bgs: Granular Bentonite. 2.5-13.0 ft-bgs: Clean, fine to coarse sand filter. 3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1040.0			2	DPT	2.2	30 / 60	5.0-5.5 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, some iron and organic staining, little light gray (N7) mottling, moist. 5.5-7.5 ft-bgs: Soft, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, some iron and organic staining, moist. 7.5-9.0 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, some iron and organic staining, moist. 9.0-10.0 ft-bgs: Firm, moderate yellow brown (10YR 5/4) fine to coarse SANDY CLAY, some Silt, some iron and organic staining, some medium dark gray (N4) mottling, moist.		
1035.0			3	DPT	2.8	26 / 36	10.0-13.0 ft-bgs: Stiff, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, some medium dark gray (N4) mottling, moist.		
1030.0									
1025.0									

LITHOLOGY LEGEND



Concrete



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary
GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011






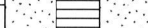

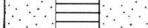


BOREHOLE LOG: MW-14

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473151.65 E: 4685836.52
GROUND SURFACE ELEV.: 1048.24
DATUM: N/A
START DATE/TIME: 3/29/2011 3:05:00 PM
END DATE/TIME: 3/29/2011 4:00:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information				
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %								
1045.0	Concrete		1	DPT	1.1	52 / 60	0.0-0.4 ft-bgs: Concrete		Steel flush mount with locking cap.					
	Very soft to firm, medium yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, little iron and organic staining, trace light gray (N7) mottling, moist.													
	0.4-2.5 ft-bgs: Very soft, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, little iron and organic staining, trace light gray (N7) mottling, moist.													
1040.0			2	DPT	1.6	58 / 60	2.5-5.0 ft-bgs: Soft, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, little iron and organic staining, trace light gray (N7) mottling, moist.		0.0-0.75 ft-bgs: Concrete seal.					
							5.0-9.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, trace fine Gravel, little iron and organic staining, trace light gray (N7) mottling, moist.							
1035.0			3	DPT	2.1	34 / 36	9.0-9.5 ft-bgs: Very soft, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, trace fine Gravel, little iron and organic staining, wet.		0.75-1.0 ft-bgs: Clean, fine to coarse sand.					
							9.5-10.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, trace fine Gravel, little iron and organic staining, moist.							
1030.0							10.0-11.5 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, trace fine Gravel, little iron and organic staining, moist.		1.0-3.0 ft-bgs: Granular Bentonite.					
							11.5-12.0 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, trace fine Gravel, and iron and organic staining, medium dark gray (N4) mottling, moist.							
1025.0							12.0-13.0 ft-bgs: Firm, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, trace fine Gravel, medium dark gray (N4) mottling, moist.		3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.					

LITHOLOGY LEGEND



Concrete



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011



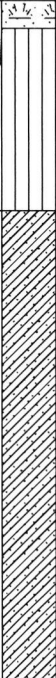
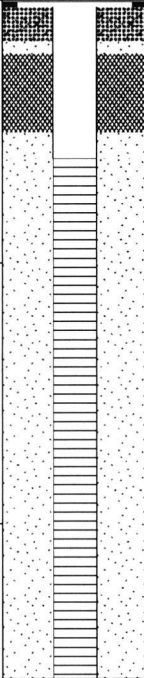
BOREHOLE LOG: MW-15

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473346.3 E: 4685811.61
GROUND SURFACE ELEV.: 1050.66
DATUM: N/A
START DATE/TIME: 3/29/2011 4:15:00 PM
END DATE/TIME: 3/29/2011 5:45:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Alt. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Stiff, grayish black (N2), SILTY CLAY, some roots and organics, moist. Stiff, grayish black (N2), SILTY CLAY, little fine Sand, light olive gray (5Y 5/2) mottling, moist.		1	DPT	0.2	44 / 60	0.0-0.5 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, some roots and organics, moist. 0.5-3.5 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, little fine Sand, moist. 3.5-4.0 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, little fine Sand, light olive gray (5Y 5/2) mottling, moist. 4.0-5.0 ft-bgs: Soft, light olive gray (5Y 5/2), fine SANDY CLAY, some Silt, trace iron staining, moist.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-1.0 ft-bgs: Clean, fine to coarse sand. 1.0-2.5 ft-bgs: Granular Bentonite. 2.5-13.0 ft-bgs: Clean, fine to coarse sand filter. 3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1045.0	Very soft to stiff, light olive gray (5Y 5/2) to medium yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, trace iron staining, moist.		2	DPT	1.0	55 / 60	5.0-6.0 ft-bgs: Soft, light olive gray (5Y 5/2), fine SANDY CLAY, some Silt, trace iron staining, moist. 6.0-8.0 ft-bgs: Very soft, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, little iron staining and trace organic staining, moist. 8.0-10.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, little iron staining and trace organic staining, moist.		
1040.0			3	DPT	2.1	36 / 36	10.0-13.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, little iron staining and trace organic staining, moist.		
1035.0									
1030.0									

LITHOLOGY LEGEND



Topsoil



USCS Silt (ML)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary
GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011



BOREHOLE LOG: MW-16

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473313.72 E: 4685811.66
GROUND SURFACE ELEV.: 1050.64
DATUM: N/A
START DATE/TIME: 3/30/2011 8:15:00 AM
END DATE/TIME: 3/30/2011 9:35:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Stiff, grayish black (N2), SILTY CLAY, some roots and organics, moist.		1	DPT	1.9	58 / 60	0.0-0.5 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, some roots and organics, moist.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-1.0 ft-bgs: Clean, fine to coarse sand. 1.0-2.5 ft-bgs: Granular Bentonite. 2.5-13.0 ft-bgs: Clean, fine to coarse sand filter. 3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
	Stiff, grayish black (N2), SILTY CLAY, little fine Sand, light olive gray (5Y 5/2) mottling, moist.						0.5-2.5 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, little fine Sand, moist.		
	Soft to stiff, light olive gray (5Y 5/2), fine SANDY CLAY, some Silt, trace iron and organic staining, some medium yellow brown (10YR 5/4) mottling, moist.				1.3		2.5-3.0 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, little fine Sand, light olive gray (5Y 5/2) mottling, moist.		
1045.0			2	DPT	2.3	58 / 60	3.0-3.5 ft-bgs: Soft, light olive gray (5Y 5/2), fine SANDY CLAY, some Silt, trace iron and organic staining, moist.		
							3.5-5.0 ft-bgs: Soft, light olive gray (5Y 5/2), fine SANDY CLAY, some Silt, trace iron and organic staining, some moderate yellow brown (10YR 5/4) mottling, moist.		
					3.1		5.0-9.0 ft-bgs: Soft, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, trace iron and organic staining, some light olive gray (5Y 5/2) mottling, moist.		
1040.0			3	DPT	4.6	30 / 36	7.5 ft-bgs: >1 cm zone of very soft, wet soil.		
							8.9 ft-bgs: >3 cm zone of very soft, wet soil.		
							9.0-10.0 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, trace iron and organic staining, some light olive gray (5Y 5/2) mottling, moist.		
1035.0							10.0-11.0 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, trace iron and organic staining, some light olive gray (5Y 5/2) mottling, moist.		
1030.0							11.0-13.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, iron and organic staining, some light olive gray (5Y 5/2) mottling, moist.		

LITHOLOGY LEGEND



Topsoil



USCS Silt (ML)



USCS Low Plasticity Sandy Clay (CL)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary
GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011




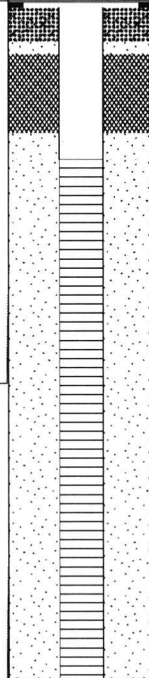
BOREHOLE LOG: MW-17

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473291.78 E: 4685808.33
GROUND SURFACE ELEV.: 1050.59
DATUM: N/A
START DATE/TIME: 3/30/2011 9:40:00 AM
END DATE/TIME: 3/30/2011 10:35:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Stiff, grayish black (N2), SILTY CLAY, some roots and organics, moist.		1	DPT	1.5	50 / 60	0.0-1.0 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, some roots and organics, moist.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-1.0 ft-bgs: Clean, fine to coarse sand. 1.0-2.5 ft-bgs: Granular Bentonite. 2.5-13.0 ft-bgs: Clean, fine to coarse sand filter. 3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
	Soft, grayish black (N2), SILTY CLAY, little fine Sand, moist.						1.0-1.5 ft-bgs: Soft, grayish black (N2), SILTY CLAY, little fine Sand, moist.		
	Loose, medium yellow brown (10YR 5/4), fine to coarse SAND, moist.						1.5-2.0 ft-bgs: Loose, moderate yellow brown (10YR 5/4), fine to coarse SAND, moist.		
	Stiff, grayish black (N2), SILTY CLAY, little fine to medium Sand, light olive gray (5Y 5/2) mottling, moist.						2.0-2.75 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, little fine to medium Sand, light olive gray (5Y 5/2) mottling, moist.		
	Firm to stiff, light olive gray (5Y 5/2) to moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, trace organic staining, moist.						2.75-3.0 ft-bgs: Stiff, light olive gray (5Y 5/2), fine SANDY CLAY, some Silt, trace organic staining, moist.		
1045.0			2	DPT	2.2	54 / 60	3.0-5.0 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, iron and organic staining, some olive gray (5Y 5/2) mottling, moist.		
							5.0-7.5 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, little iron and organic staining, some olive gray (5Y 5/2) mottling, moist.		
			3	DPT	11.6	30 / 36	7.5-8.5 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, little iron and organic staining, some olive gray (5Y 5/2) mottling, moist. Grayish blue (SPB 5/2) discoloration, odor.		
1040.0							8.5-10.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, iron and organic staining, some olive gray (5Y 5/2) mottling, moist.		
							10.0-13.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, iron and organic staining, some olive gray (5Y 5/2) mottling, moist.		
1035.0									
1030.0									

LITHOLOGY LEGEND



Topsoil
USCS Low Plasticity Sandy Clay (CLS)



USCS Silt (ML)



USCS Well-graded Sand (SW)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary
GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011




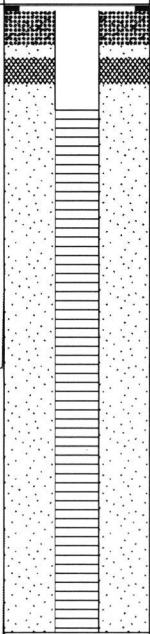

BOREHOLE LOG: MW-18

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 12
DEPTH OF SOIL DRILL: 12
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473227.53 E: 4685850.88
GROUND SURFACE ELEV.: 1049.61
DATUM: N/A
START DATE/TIME: 3/30/2011 10:50:00 AM
END DATE/TIME: 3/30/2011 12:10:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information		
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)				
1045.0	Concrete		1	DPT	2.0	44 / 60	0.0-0.5 ft-bgs: Concrete		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-1.0 ft-bgs: Clean, fine to coarse sand. 1.0-1.5 ft-bgs: Granular Bentonite. 1.5-12.0 ft-bgs: Clean, fine to coarse sand filter. 2.0-12.0 ft-bgs: 1.5-inch pre-packed PVC well screen.		
	Loose, medium yellow brown (10YR 5/4), fine to coarse SAND, moist.	0.5-0.75 ft-bgs: Loose, moderate yellow brown (10YR 5/4), fine to coarse SAND, moist.									
	Stiff, grayish black (N2), SILTY CLAY, little fine Sand, trace iron staining, moist.	0.75-1.5 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, little fine Sand, moist.									
	Soft to stiff, medium yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, some iron and organic staining, trace light olive gray (5Y 5/2) mottling, moist.		2	DPT	1.2	55 / 60	1.5-2.5 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, little fine Sand, trace iron staining, moist.				
							2.5-3.0 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, little fine Sand, trace iron staining, trace moderate yellow brown (10YR 5/4) mottling, moist.				
			3	DPT	2.7	22 / 24	3.0-5.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, some iron and organic staining, trace light olive gray (5Y 5/2) mottling, moist.				
							5.0-6.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, some iron and organic staining, trace light olive gray (5Y 5/2) mottling, moist.				
							6.0-6.5 ft-bgs: Soft, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, some iron and organic staining, trace light olive gray (5Y 5/2) mottling, moist.				
			1040.0								6.5-8.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, some iron and organic staining, trace light olive gray (5Y 5/2) mottling, moist.
											8.0-10.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, and iron and organic staining, trace light olive gray (5Y 5/2) mottling, moist.
1035.0						10.0-12.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, and iron and organic staining, trace light olive gray (5Y 5/2) mottling, moist.					
1030.0											
1025.0											

LITHOLOGY LEGEND



Concrete
USCS Low Plasticity Sandy Clay (CLS)



USCS Well-graded Sand (SW)



USCS Silt (ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary
GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011




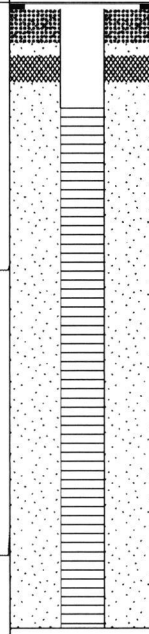
BOREHOLE LOG: MW-19

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 12
DEPTH OF SOIL DRILL: 12
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473290.59 E: 4685723.36
GROUND SURFACE ELEV.: 1050.73
DATUM: N/A
START DATE/TIME: 3/30/2011 12:30:00 PM
END DATE/TIME: 3/30/2011 1:40:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Stiff, dark yellow brown (10YR 4/2), SILTY CLAY, some Silt, some fine to coarse Sand, trace gravel, moist.		1	DPT	0.9	58 / 60	0.0-0.75 ft-bgs: Stiff, dark yellow brown (10YR 4/2), SILTY CLAY, some Silt, some fine to coarse Sand, trace gravel, moist.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-1.0 ft-bgs: Clean, fine to coarse sand. 1.0-1.5 ft-bgs: Granular Bentonite. 1.5-12.0 ft-bgs: Clean, fine to coarse sand filter. 2.0-12.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
	Soft to firm, medium yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, some iron staining, little organic staining, little light olive gray (5Y 4/2) mottling, moist.				0.7		0.75-2.5 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, some iron staining, little organic staining, little light olive gray (5Y 4/2) mottling, moist. 2.5-5.0 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, some iron staining, little organic staining, trace light olive gray (5Y 4/2) mottling, moist.		
1045.0							5.0-5.5 ft-bgs: Firm, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, some iron staining, little organic staining, trace light olive gray (5Y 4/2) mottling, moist. 5.5-9.0 ft-bgs: Soft, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, some iron staining, little organic staining, trace light olive gray (5Y 4/2) mottling, moist. 9.0-10.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, trace iron and organic staining, trace light olive gray (5Y 4/2) mottling, moist.		
1040.0			2	DPT	83.5	30 / 60			
			3	DPT	620	22 / 24	10.0-12.0 ft-bgs: Stiff, moderate yellow brown (10YR 5/4), fine SANDY CLAY, some Silt, trace iron and organic staining, trace light olive gray (5Y 4/2) mottling, moist.		
1035.0									
1030.0									

LITHOLOGY LEGEND



Fill (made ground)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011




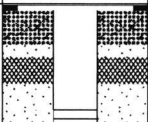

BOREHOLE LOG: MW-20

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 12
DEPTH OF SOIL DRILL: 12
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473246.16 E: 4685692.14
GROUND SURFACE ELEV.: 1050.39
DATUM: N/A
START DATE/TIME: 3/30/2011 1:45:00 PM
END DATE/TIME: 3/30/2011 2:45:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information	
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %					
1050.0	Gravel Fill Soft to firm, grayish black (N2), fine to coarse SANDY/SILTY CLAY, some Silt, moist.		1	DPT	0.2	50 / 60	0.0-0.25 ft-bgs: Gravel Fill 0.25-2.5 ft-bgs: Firm, grayish black (N2), fine to coarse SANDY CLAY, some Silt, moist. 2.5-5.0 ft-bgs: Soft, light olive gray (5Y 5/2), SILTY CLAY, little, iron staining, moist. 4.25 ft-bgs: < 1cm fine Sand seam, wet.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-1.0 ft-bgs: Clean, fine to coarse sand. 1.0-1.5 ft-bgs: Granular Bentonite. 1.5-12.0 ft-bgs: Clean, fine to coarse sand filter. 2.0-12.0 ft-bgs: 1.5-inch pre-packed PVC well screen.		
1045.0	Loose, medium yellow brown (10YR 5/4), fine to coarse SAND, wet. Soft to firm, medium yellow brown (10YR 5/4), fine to coarse SANDY CLAY, some Silt, little iron staining, trace organic staining, moist.				0.6					53 / 60	0.2
1040.0					3						DPT
1035.0											
1030.0											

LITHOLOGY LEGEND



Fill (made ground)
USCS Low Plasticity Silty
Clay (CL-S)



USCS Low Plasticity Silty
Clay (CL-ML)



USCS Well-graded Sand
(SW)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011




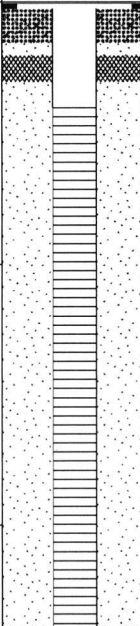




BOREHOLE LOG: MW-21

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 12
DEPTH OF SOIL DRILL: 12
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473266.47 E: 4685590.13
GROUND SURFACE ELEV.: 1050.37
DATUM: N/A
START DATE/TIME: 3/30/2011 3:55:00 PM
END DATE/TIME: 3/30/2011 4:40:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %				
1050.0	Concrete		1	DPT	6.0	54 / 60	0.0-0.5 ft-bgs: Concrete 0.5-2.0 ft-bgs: Very stiff, black (N1), CLAY, odor, moist. 2.0-4.0 ft-bgs: Stiff, black (N1), CLAY, odor, moist. 4.0-5.0 ft-bgs: Firm, medium bluish gray (5B 5/1), fine SANDY CLAY, some Silt, odor, moist.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-1.0 ft-bgs: Clean, fine to coarse sand. 1.0-1.5 ft-bgs: Granular Bentonite. 1.5-12.0 ft-bgs: Clean, fine to coarse sand filter. 2.0-12.0 ft-bgs: 1.5-inch pre-packed PVC well screen.	
	Very stiff to stiff, black (N1), CLAY, odor, moist.				31.1					
1045.0	Very soft to firm, medium bluish gray (5B 5/1), fine SANDY CLAY, some Silt, odor, moist.									
	Loose, medium bluish gray (5B 5/1), fine SAND, odor, wet.		2	DPT	119	33 / 60	5.0-9.4 ft-bgs: Very soft, medium bluish gray (5B 5/1), fine SANDY CLAY, some Silt, odor, moist. 9.4-9.8 ft-bgs: Loose, medium bluish gray (5B 5/1), fine SAND, odor, wet. 9.8-10.0 ft-bgs: Firm, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, odor, moist.			
1040.0	Firm, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, odor, moist.									
			3	DPT	10.5	24 / 24	9.8-10.0 ft-bgs: Firm, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, odor, moist. 10.0-12.0 ft-bgs: Firm, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, odor, moist.			
1035.0										
1030.0										

LITHOLOGY LEGEND



Concrete
USCS Poorly-graded Sand (SP)



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011





BOREHOLE LOG: MW-21A

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 12
DEPTH OF SOIL DRILL: 12
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473266.6 E: 4685613.66
GROUND SURFACE ELEV.: 1050.32
DATUM: N/A
START DATE/TIME: 3/30/2011 2:50:00 PM
END DATE/TIME: 3/30/2011 3:50:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Concrete		1	DPT	2.1	47 / 60			Well Not Installed
	Very stiff to stiff, black (N1), CLAY, odor, moist.				75.3				
1045.0	Very soft to firm, medium bluish gray (5B 5/1), fine SANDY CLAY, some Silt, odor, moist.				28	54 / 60			
			2	DPT	9.8				
1040.0	Loose, medium bluish gray (5B 5/1), fine SAND, odor, wet.		3	DPT	N/A	0 / 24			
	Firm, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, odor, moist.								
1035.0									
1030.0									

LITHOLOGY LEGEND



Concrete
USCS Poorly-graded Sand (SP)



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011




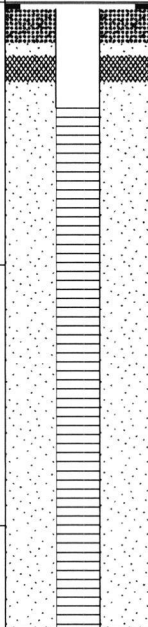



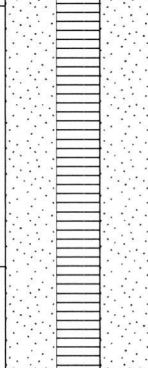



BOREHOLE LOG: MW-22

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 12
DEPTH OF SOIL DRILL: 12
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473266.3 E: 4685566.65
GROUND SURFACE ELEV.: 1050.83
DATUM: N/A
START DATE/TIME: 3/30/2011 4:45:00 PM
END DATE/TIME: 3/30/2011 5:45:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1050.0	Concrete		1	DPT	7.1	55 / 60	0.0-0.5 ft-bgs: Concrete 0.5-2.0 ft-bgs: Very stiff, black (N1), CLAY, odor, moist. 2.0-3.0 ft-bgs: Stiff, black (N1), CLAY, odor, moist. 3.0-5.0 ft-bgs: Stiff, black (N1), SILTY CLAY, odor, moist.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-1.0 ft-bgs: Clean, fine to coarse sand. 1.0-1.5 ft-bgs: Granular Bentonite. 1.5-12.0 ft-bgs: Clean, fine to coarse sand filter. 2.0-12.0 ft-bgs: 1.5-inch pre-packed PVC well screen.	
	Very stiff to stiff, black (N1), CLAY, odor, moist.				5.3					
	Stiff, black (N1), SILTY CLAY, odor, moist.									
1045.0	Very soft to firm, medium bluish gray (5B 5/1), SILTY CLAY, odor, moist.		2	DPT	23.5	33 / 60	5.0-5.5 ft-bgs: Firm, medium bluish gray (5B 5/1), SILTY CLAY, odor, moist. 5.5-9.5 ft-bgs: Very soft, medium bluish gray (5B 5/1), SILTY CLAY, odor, moist. 9.5-10.0 ft-bgs: Loose, medium bluish gray (5B 5/1), fine to coarse SAND, odor, wet.			
	Loose, medium bluish gray (5B 5/1), fine to coarse SAND, odor, wet.		3	DPT	7.1	24 / 24	10.0-10.5 ft-bgs: Loose, medium bluish gray (5B 5/1), medium SILTY SAND, odor, wet. 10.5-12.0 ft-bgs: Firm, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, odor, moist.			
1040.0	Loose, medium bluish gray (5B 5/1), medium SILTY SAND, odor, wet.									
	Firm, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, odor, moist.									
1035.0										
1030.0										

LITHOLOGY LEGEND



Concrete



USCS Low Plasticity Clay (CL)
USCS Low Plasticity Sandy Clay (CLS)



USCS Well-graded Sand (SW)

USCS Silty Sand (SM)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011




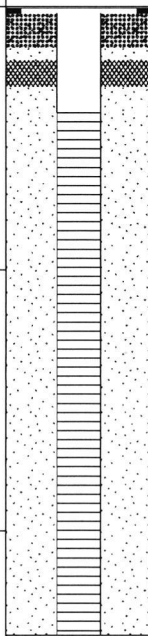




BOREHOLE LOG: MW-23

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 12
DEPTH OF SOIL DRILL: 12
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473265.78 E: 4685542.41
GROUND SURFACE ELEV.: 1050.79
DATUM: N/A
START DATE/TIME: 3/30/2011 5:50:00 PM
END DATE/TIME: 3/30/2011 6:50:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %				
1050.0	Concrete		1	DPT	0.6	47 / 60	0.0-0.5 ft-bgs: Concrete 0.5-2.0 ft-bgs: Very stiff, black (N1), CLAY, moist. 2.0-3.0 ft-bgs: Stiff, black (N1), CLAY, moist. 3.0-4.0 ft-bgs: Stiff, olive black (5Y 2/1), SILTY CLAY, trace fine Sand, moist. 4.0-5.0 ft-bgs: Stiff, olive black (5Y 2/1), SILTY CLAY, trace fine Sand, some iron staining, moist.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-1.0 ft-bgs: Clean, fine to coarse sand. 1.0-1.5 ft-bgs: Granular Bentonite. 1.5-12.0 ft-bgs: Clean, fine to coarse sand filter. 2.0-12.0 ft-bgs: 1.5-inch pre-packed PVC well screen.	
1045.0	Very stiff to stiff, black (N1), CLAY, some iron staining, moist.				0.4					
	Very soft, olive gray (5Y 4/1), fine to medium SANDY CLAY, some Silt, trace iron staining, moist.				0.5					
	Loose, medium bluish gray (5B 5/1), fine to coarse SILTY SAND, wet.		2	DPT	4.8	40 / 60	5.0-6.0 ft-bgs: Very soft, olive gray (5Y 4/1), fine to medium SANDY CLAY, some Silt, trace iron staining, moist. 6.0-9.75 ft-bgs: Loose, medium bluish gray (5B 5/1), fine to coarse SILTY SAND, wet. 9.75-10.0 ft-bgs: Stiff, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, and iron staining, moist.			
	Stiff, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, and iron staining, moist.				0.3					
1040.0			3	DPT		24 / 24	10.0-10.5 ft-bgs: Stiff, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, and iron staining, moist. 10.5-12.0 ft-bgs: Stiff, medium dark gray (N4), fine to coarse SANDY CLAY, some Silt, moist.			
1035.0										
1030.0										

LITHOLOGY LEGEND



Concrete
USCS Silty Sand (SM)



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Matrix Environmental
DRILLER: Gary

GOLDER INSPECTOR: Joshua Janzen

LOGGED BY: Joshua Nasrallah
LOGGED BY DATE: 4/12/2011
CHECKED BY: James S. Peace
CHECKED BY DATE: 5/13/2011




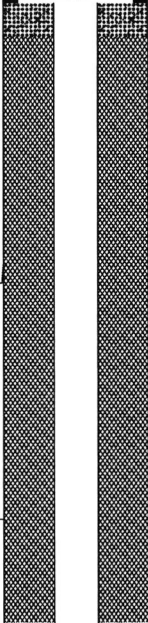
BOREHOLE LOG: MW-24 (MIP-20/SB-17)

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 18
DEPTH OF SOIL DRILL: 18
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473483.34 E: 4685720.81
GROUND SURFACE ELEV.: 1050.72
DATUM: N/A
START DATE/TIME: 5/2/2012
END DATE/TIME: 5/2/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Concrete		1	DPT	0.3	48 / 60	0.0-0.75 ft-bgs: Concrete 0.75-1.25 ft-bgs: Compact, moderate brown, 5YR 3/4), medium to coarse subangular SAND, little fine to medium Gravel, moist (SW). 1.25-4.0 ft-bgs: Stiff, olive black (5Y 2/1), SILTY CLAY, trace fine to medium Sand, trace fine to medium Sand, trace organics, moist (ML-CL). 4.0-5.0 ft-bgs: Firm, olive gray (5Y 4/1) SILTY CLAY, little medium to coarse Sand, trace fine Gravel, moist (ML-CL).		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-12.0 ft-bgs: Granular Bentonite.
1045.0	Compact, brown, medium to coarse SAND, little Gravel. Firm to stiff, gray to brown, SILTY CLAY, trace to little Sand, trace gravel, trace organics.						Sampled collected 2.0-4.0 ft.		
1040.0							5.0-10.0 ft-bgs: Not Sampled.		
1035.0							10.0-14.0 ft-bgs: Stiff, medium gray (N5) mottled moderate yellowish brown (10YR 5/4), SILTY CLAY, little medium to coarse sand, trace fine gravel, slightly moist (ML-CL). 14.0-15.0 ft-bgs: Firm, medium dark gray (N4), SILTY CLAY, little medium to coarse Sand, trace fine Gravel, moist (ML-CL). Sampled collected 10.0-12.0 ft.		
1030.0									12.0-18.0 ft-bgs: Clean, fine to coarse sand filter. 13.0-18.0 ft-bgs: 1.5-inch pre-packed PVC well screen with filter (20/40 sand).

LITHOLOGY LEGEND



Concrete



USCS Well-graded Sand (SW)



USCS Low Plasticity Silty Clay (CL-ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012




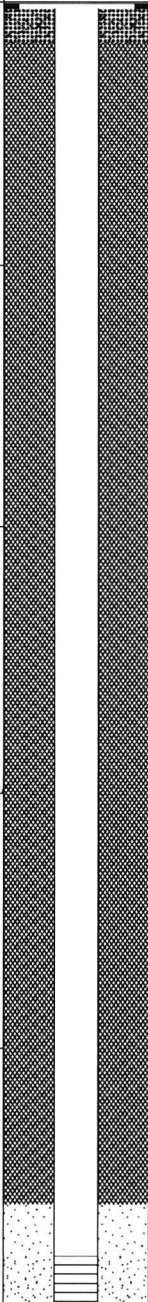




BOREHOLE LOG: MW-25D (MIP-32/LIF-03/SB-13)

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 29
DEPTH OF SOIL DRILL: 29
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473438.13 E: 4685731.44
GROUND SURFACE ELEV.: 1050.78
DATUM: N/A
START DATE/TIME: 5/2/2012
END DATE/TIME: 5/2/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Concrete		1	DPT	3.2	53 / 60	0.0-0.75 ft-bgs: Concrete 0.75-4.0 ft-bgs: Stiff, olive black (5Y 2/1), SILTY CLAY, trace medium to coarse Sand, trace organics, slightly moist (ML-CL). 4.0-5.0 ft-bgs: Firm, medium dark gray (N4), SILTY CLAY, little fine to medium Sand, trace fine Gravel, slightly moist (ML-CL). Sample collected 1.0-3.0 ft. Sample collected 4.0-6.0 ft.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-23.0 ft-bgs: Granular Bentonite.
1045.0	Firm to stiff, black to gray, SILTY CLAY, little to trace Sand, trace gravel, trace organics.						5.0-10.0 ft-bgs: Firm, medium dark gray (N4), SILTY CLAY, little fine to medium Sand, trace fine Gravel, slightly moist (ML-CL).		
1040.0	Soft, gray, SILT, some Sand, some Clay.		3	DPT	36.9	58 / 60	10.0-11.5 ft-bgs: Soft, medium dark gray (N4), SILT, some Clay, some fine to coarse Sand, wet (ML). 11.5-13.0 ft-bgs: Firm, medium dark gray (N4), CLAYEY SILT, little medium to coarse Sand, trace fine Gravel, moist (ML-CL). 13.0-15.0 ft-bgs: Stiff, olive gray (5Y 4/1) mottled moderate brown (5YR 3/4) SILTY CLAY, trace medium to coarse Sand, trace fine Gravel, moist (ML-CL). Sample collected 10.0-12.0 ft.		
1035.0	Firm to stiff, gray to brown, CLAYEY SILT to SILTY CLAY, little to trace Sand, little to trace gravel.						15.0-20.0 ft-bgs: Stiff, olive gray (5Y 4/1), SILTY CLAY, trace fine Gravel, trace medium to coarse Sand, moist (ML-CL). Sample collected 16.0-18.0 ft.		
1030.0			5	DPT	6.7	43 / 60	20.0-24.0 ft-bgs: Stiff, olive gray (5Y 4/1), SILTY CLAY, trace fine Gravel, trace medium to coarse Sand, moist (ML-CL). 24.0-25.0 ft-bgs: Stiff, olive gray (5Y 4/1), SILTY CLAY, little fine Gravel, trace medium to coarse Sand (ML-CL). 23.0-29.0 ft-bgs: Clean, fine to coarse sand filter.		

LITHOLOGY LEGEND



Concrete



USCS Low Plasticity Silty Clay (CL-ML)



USCS Silt (ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette

GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012




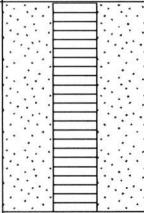
BOREHOLE LOG: MW-25D (MIP-32/LIF-03/SB-13)

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 29
DEPTH OF SOIL DRILL: 29
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473438.13 E: 4685731.44
GROUND SURFACE ELEV.: 1050.78
DATUM: N/A
START DATE/TIME: 5/2/2012
END DATE/TIME: 5/2/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Alt. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1025.0	Firm to stiff, gray to brown, CLAYEY SILT to SILTY CLAY, little to trace Sand, little to trace gravel.		6	DPT	0.0	57 / 60	25.0-30.0 ft-bgs: Stiff, olive gray (5Y 4/1), SILTY CLAY, trace fine Gravel, trace medium to coarse Sand, little fine Gravel, moist (ML-CL). Sample collected 26.0-28.0 ft.		23.0-29.0 ft-bgs: Clean, fine to coarse sand filter. 24.0-29.0 ft-bgs: 1.5-inch pre-packed PVC well screen with filter (20/40 sand).
1020.0									
1015.0									
1010.0									
1005.0									

LITHOLOGY LEGEND



Concrete



USCS Low Plasticity Silty Clay (CL-ML)



USCS Silt (ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012




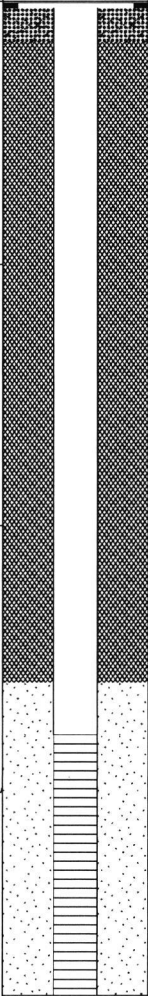



BOREHOLE LOG: MW-25S (MIP 32/LIF-03/SB-13)

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 18
DEPTH OF SOIL DRILL: 18
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473437.68 E: 4685727.64
GROUND SURFACE ELEV.: 1050.76
DATUM: N/A
START DATE/TIME: 5/2/2012
END DATE/TIME: 5/2/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Concrete		1	DPT	3.2	53 / 60	0.0-0.75 ft-bgs: Concrete 0.75-4.0 ft-bgs: Stiff, olive black (5Y 2/1), SILTY CLAY, trace medium to coarse Sand, trace organics, slightly moist (ML-CL). 4.0-5.0 ft-bgs: Firm, medium dark gray (N4), SILTY CLAY, little fine to medium Sand, trace fine Gravel, slightly moist (ML-CL). Sample collected 1.0-3.0 ft. Sample collected 4.0-6.0 ft.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-13.0 ft-bgs: Granular Bentonite.
1045.0	Firm to stiff, black to gray, SILTY CLAY, little to trace Sand, trace gravel, trace organics.						5.0-10.0 ft-bgs: Firm, medium dark gray (N4), SILTY CLAY, little fine to medium Sand, trace fine Gravel, slightly moist (ML-CL).		
1040.0	Soft, gray, SILT, some Sand, some Clay.		3	DPT	36.9	58 / 60	10.0-11.5 ft-bgs: Soft, medium dark gray (N4), SILT, some Clay, some fine to coarse Sand, wet (ML). 11.5-13.0 ft-bgs: Firm, medium dark gray (N4), CLAYEY SILT, little medium to coarse Sand, trace fine Gravel, moist (ML-CL). 13.0-15.0 ft-bgs: Stiff, olive gray (5Y 4/1) mottled moderate brown (5YR 3/4) SILTY CLAY, trace medium to coarse Sand, trace fine Gravel, moist (ML-CL). Sample collected 10.0-12.0 ft.		13.0-19.0 ft-bgs: Clean, fine to coarse sand filter. 14.0-19.0 ft-bgs: 1.5-inch pre-packed PVC well screen with filter (20/40 sand).
1035.0	Firm to stiff, gray to brown, CLAYEY SILT to SILTY CLAY, little to trace Sand, little to trace gravel.						15.0-20.0 ft-bgs: Stiff, olive gray (5Y 4/1), SILTY CLAY, trace fine Gravel, trace medium to coarse Sand, moist (ML-CL). Sample collected 16.0-18.0 ft.		
1030.0			4	DPT	2.5	57 / 60	20.0-24.0 ft-bgs: Stiff, olive gray (5Y 4/1), SILTY CLAY, trace fine Gravel, trace medium to coarse Sand, moist (ML-CL). 24.0-25.0 ft-bgs: Stiff, olive gray (5Y 4/1), SILTY CLAY, little fine Gravel, trace medium to coarse Sand (ML-CL).		
			5	DPT	6.7	43 / 60			

LITHOLOGY LEGEND



Concrete



USCS Low Plasticity Silty Clay (CL-ML)



USCS Silt (ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012




BOREHOLE LOG: MW-25S (MIP 32/LIF-03/SB-13)

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 18
DEPTH OF SOIL DRILL: 18
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473437.68 E: 4685727.64
GROUND SURFACE ELEV.: 1050.76
DATUM: N/A
START DATE/TIME: 5/2/2012
END DATE/TIME: 5/2/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1025.0	Firm to stiff, gray to brown, CLAYEY SILT to SILTY CLAY, little to trace Sand, little to trace gravel.		6	DPT	0.0	57 / 60	25.0-30.0 ft-bgs: Stiff, olive gray (5Y 4/1), SILTY CLAY, trace fine Gravel, trace medium to coarse Sand, little fine Gravel, moist (ML-CL). Sample collected 26.0-28.0 ft.		
1020.0									
1015.0									
1010.0									
1005.0									

LITHOLOGY LEGEND



Concrete



USCS Low Plasticity Silty Clay (CL-ML)



USCS Silt (ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012



BOREHOLE LOG: MW-26D (MIP-21/SB-14)

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 25
DEPTH OF SOIL DRILL: 25
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473381.54 E: 4685687.58
GROUND SURFACE ELEV.: 1050.78
DATUM: N/A
START DATE/TIME: 5/2/2012
END DATE/TIME: 5/2/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %				
1050.0								0.0-5.0 ft-bgs: Not Sampled.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-19.0 ft-bgs: Granular Bentonite.
1045.0	Firm to stiff, gray to brown, SILTY CLAY, little to trace Sand, trace gravel.		1	DPT	3.8	30 / 60		5.0-8.5 ft-bgs: Firm, light olive gray (5Y 6/1) and moderate yellowish brown (10YR 5/4), SILTY CLAY, trace fine Gravel, trace medium to coarse Sand, moist (ML-CL). 8.5-10.0 ft-bgs: Firm, light olive gray (5Y 6/1) and moderate yellowish brown (10YR 5/4), SILTY CLAY, little medium to coarse Sand, trace fine Gravel, moist (ML-CL). Sampled collected 7.0-9.0 ft.		
1040.0			2	DPT	67.2	57 / 60		10.0-13.5 ft-bgs: Stiff, light olive gray (5Y 6/1) and moderate brown (5Y 3/4), SILTY CLAY, trace fine gravel, trace medium to coarse Sand, slightly moist (ML-CL). 13.5-15.0 ft-bgs: Stiff, medium dark gray (N4), SILTY CLAY, little medium to coarse Sand, trace fine Gravel, moist (ML-CL). Sampled collected 12.0-14.0 ft.		
1035.0								15.0-20.0 ft-bgs: Not Sampled.		
1030.0			3	DPT	2.6	48 / 60		20.0-25.0 ft-bgs: Stiff, medium dark gray (N4), SILTY CLAY, little medium to coarse Sand, trace fine Gravel, moist (ML-CL). Sampled collected 23.0-25.0 ft.		19.0-25.0 ft-bgs: Clean, fine to coarse sand filter. 20.0-25.0 ft-bgs: 1.5-inch pre-packed PVC well screen with filter (20/40 sand).

LITHOLOGY LEGEND



USCS Low Plasticity Silty
Clay (CL-ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette

GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012



BOREHOLE LOG: MW-26S (MIP-21/SB-14)

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 16
DEPTH OF SOIL DRILL: 16
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473379.38 E: 4685687.74
GROUND SURFACE ELEV.: 1050.72
DATUM: N/A
START DATE/TIME: 5/2/2012
END DATE/TIME: 5/2/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Alt. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0							0.0-5.0 ft-bgs: Not Sampled.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-10.0 ft-bgs: Granular Bentonite.
1045.0	Firm to stiff, gray to brown, SILTY CLAY, little to trace Sand, trace gravel.		1	DPT	3.8	30 / 60	5.0-8.5 ft-bgs: Firm, light olive gray (5Y 6/1) and moderate yellowish brown (10YR 5/4), SILTY CLAY, trace fine Gravel, trace medium to coarse Sand, moist (ML-CL). 8.5-10.0 ft-bgs: Firm, light olive gray (5Y 6/1) and moderate yellowish brown (10YR 5/4), SILTY CLAY, little medium to coarse Sand, trace fine Gravel, moist (ML-CL). Sampled collected 7.0-9.0 ft.		
1040.0			2	DPT	67.2	57 / 60	10.0-13.5 ft-bgs: Stiff, light olive gray (5Y 6/1) and moderate brown (5Y 3/4), SILTY CLAY, trace fine gravel, trace medium to coarse Sand, slightly moist (ML-CL). 13.5-15.0 ft-bgs: Stiff, medium dark gray (N4), SILTY CLAY, little medium to coarse Sand, trace fine Gravel, moist (ML-CL). Sampled collected 12.0-14.0 ft.		10.0-16.0 ft-bgs: Clean, fine to coarse sand filter. 11.0-16.0 ft-bgs: 1.5-inch pre-packed PVC well screen with filter (20/40 sand).
1035.0							15.0-20.0 ft-bgs: Not Sampled.		
1030.0			3	DPT	2.6	48 / 60	20.0-25.0 ft-bgs: Stiff, medium dark gray (N4), SILTY CLAY, little medium to coarse Sand, trace fine Gravel, moist (ML-CL). Sampled collected 23.0-25.0 ft.		

LITHOLOGY LEGEND



USCS Low Plasticity Silty Clay (CL-ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012




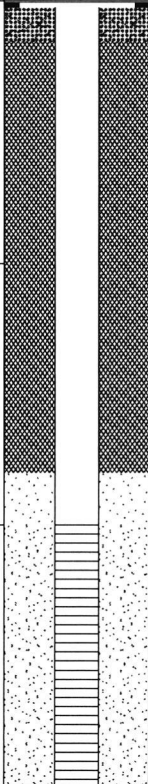













BOREHOLE LOG: MW-27 (MIP-30/LIF-15/SB-03)

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 15
DEPTH OF SOIL DRILL: 15
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473322.73 E: 4685551.9
GROUND SURFACE ELEV.: 1050.72
DATUM: N/A
START DATE/TIME: 5/3/2012
END DATE/TIME: 5/3/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Concrete		1	DPT	15.5	49 / 60	0.0-0.75 ft-bgs: Concrete 0.75-1.25 ft-bgs: Compact, moderate brown (5YR 3/4), fine to coarse SAND, some silt, wet (SW). 1.25-5.0 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, little fine to medium Sand, trace organics, slight odor, slightly moist (ML-CL). Sampled collected 2.0-4.0 ft.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-9.0 ft-bgs: Granular Bentonite.
	Compact, moderate brown, fine to coarse SAND, some Silt.								
	Firm to very stiff, black to gray, SILTY CLAY, some to trace Sand, trace Gravel.								
1045.0			2	DPT	111.4	35 / 60	5.0-8.5 ft-bgs: Stiff, grayish black (N2), SILTY CLAY, little fine to medium Sand, trace organics, slight odor, slightly moist (ML-CL). 8.5-10.0 ft-bgs: Stiff, dark gray (5G 4/1), SILTY CLAY, trace fine gravel, trace fine to medium Sand, slightly moist (ML-CL). Sampled collected 6.0-8.0 ft.		9.0-15.0 ft-bgs: Clean, fine to coarse sand filter.
									
1040.0			3	DPT	3.9	22 / 60	10.0-15.0 ft-bgs: Very stiff, dark greenish gray (5G 4/1), mottled moderate brown (5YR 4/4), SILTY CLAY, some fine to coarse Sand, trace fine to medium Gravel, slightly moist (ML-CL).		10.0-15.0 ft-bgs: 1.5-inch pre-packed PVC well screen with filter (20/40 sand).
									
1035.0			4	DPT	31.3	55 / 60	15.0-16.25 ft-bgs: Firm, dark greenish gray (5G 4/1) and olive black (5Y 2/1), SILTY CLAY, some medium to coarse Sand, trace fine Gravel, odor, moist (ML-CL). 16.25-17.75 ft-bgs: Stiff, brownish gray (5YR 4/1), SILTY CLAY, trace medium to coarse Sand, slightly moist (ML-CL). 17.75-20.0 ft-bgs: Firm, greenish black (5GY 2/1) SILTY CLAY, trace medium to coarse sand, slightly moist (ML-CL). Sampled collected 16.0-18.0 ft.		
									
1030.0			5	DPT	0.5	36 / 60	20.0-25.0 ft-bgs: Firm, greenish black (5G 2/1), SILTY CLAY, trace medium to coarse Sand, moist. (ML-CL) Sampled collected 22.0-24.0 ft.		
									

LITHOLOGY LEGEND



Concrete



USCS Well-graded Sand (SW)



USCS Low Plasticity Silty Clay (CL-ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012




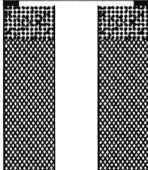


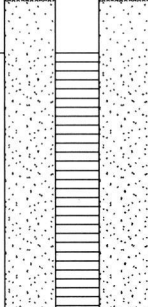
BOREHOLE LOG: MW-28 (MIP-34/SB-02)

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 18
DEPTH OF SOIL DRILL: 18
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473352.03 E: 4685743
GROUND SURFACE ELEV.: 1050.8
DATUM: N/A
START DATE/TIME: 5/3/2012
END DATE/TIME: 5/3/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Concrete		1	DPT	5.1	47 / 60	0.0-0.75 ft-bgs: Concrete		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-12.0 ft-bgs: Granular Bentonite.
	Compact, moderate brown, SILTY SAND.						0.7-1.5 ft-bgs: Compact, moderate brown (5YR 3/4), medium to coarse, SILTY SAND, wet.		
	Firm to stiff, black to gray to brown, SILTY CLAY, little to trace Sand, trace Gravel.						1.5-2.25 ft-bgs: Firm, olive black (5Y 2/1), SILTY CLAY, trace medium to coarse Sand, moist. 2.25-5.0 ft-bgs: Stiff, medium light gray (NG) mottled moderate yellowish brown (10YR 5/4), SILTY CLAY, little fine to medium Sand, trace fine Gravel, slightly moist (ML-CL).		
1045.0							5.0-13.0 ft-bgs: Not sampled.		
1040.0									
1035.0			2	DPT	548	60 / 60	13.0-18.0 ft-bgs: Stiff, dark gray (N3), SILTY CLAY, trace fine to medium Gravel, trace medium to coarse Sand, slightly moist (ML-CL). Sample collected 14.0-16.0 ft.		12.0-18.0 ft-bgs: Clean, fine to coarse sand filter. 13.0-18.0 ft-bgs: 1.5-inch pre-packed PVC well screen with filter (20/40 sand).
1030.0							18.0-25.0 ft-bgs: Not sampled.		

LITHOLOGY LEGEND



Concrete



USCS Well-graded Sand (SW)



USCS Low Plasticity Silty Clay (CL-ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012




BOREHOLE LOG: MW-28 (MIP-34/SB-02)

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 18
DEPTH OF SOIL DRILL: 18
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473352.03 E: 4685743
GROUND SURFACE ELEV.: 1050.8
DATUM: N/A
START DATE/TIME: 5/3/2012
END DATE/TIME: 5/3/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1025.0	Firm to stiff, black to gray to brown, SILTY CLAY, little to trace Sand, trace Gravel.		3	DPT	3.0	57 / 60	25.0-30.0 ft-bgs: Stiff, dark gray (N3), SILTY CLAY, trace fine Gravel, trace fine to medium Sand, slightly moist (ML-CL). Sample collected 28.0-30.0 ft.		
1020.0									
1015.0									
1010.0									
1005.0									

LITHOLOGY LEGEND



Concrete



USCS Well-graded Sand (SW)



USCS Low Plasticity Silty Clay (CL-ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette

GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012



BOREHOLE LOG: MW-29 (MIP-03/LIF-02/SB-15)

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 21
DEPTH OF SOIL DRILL: 21
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473290.58 E: 4685720.39
GROUND SURFACE ELEV.: 1050.61
DATUM: N/A
START DATE/TIME: 5/3/2012
END DATE/TIME: 5/3/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0									
1045.0							0.0-10.0 ft-bgs: Not Sampled.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-15.0 ft-bgs: Granular Bentonite.
1040.0	Firm to stiff, brown to gray, SILTY CLAY, little to trace Sand, little to trace gravel.		1	DPT	977.3	58 / 60	10.0-12.5 ft-bgs: Firm, moderate yellowish brown (10YR 5/4) mottled with moderate brown (5Y 3/4), SILTY CLAY, trace fine gravel, trace medium to coarse Sand, moist (ML-CL). 12.5-14.25 ft-bgs: Firm, moderate yellowish brown (10YR 5/4) mottled with moderate brown (5Y 3/4), SILTY CLAY, little fine gravel, little medium to coarse Sand, moist (ML-CL). 14.25-15.0 ft-bgs: Stiff, medium dark gray (N4) SILTY CLAY, little medium to coarse Sand, trace fine Gravel, moist (ML-CL). Sampled collected 13.0-15.0 ft. 15.0-17.0 ft-bgs: Not Sampled.		
1035.0									15.0-21.0 ft-bgs: Clean, fine to coarse sand filter.
1030.0			2	DPT	0.7	56 / 60	17.0-22.0 ft-bgs: Firm, medium dark gray (N4), SILTY CLAY, trace fine to medium Gravel, trace medium to coarse Sand, moist (ML-CL). Sampled collected 19.0-21.0 ft.		16.0-21.0 ft-bgs: 1.5-inch pre-packed PVC well screen with filter (20/40 sand).

LITHOLOGY LEGEND



USCS Low Plasticity Silty Clay (CL-ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012



BOREHOLE LOG: MW-30 (MIP-05/LIF-17/SB-16)

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 26
DEPTH OF SOIL DRILL: 26
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE: -90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473267.46 E: 4685592.54
GROUND SURFACE ELEV.: 1050.35
DATUM: N/A
START DATE/TIME: 5/3/2012
END DATE/TIME: 5/3/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0							0.0-10.0 ft-bgs: Not Sampled.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-20.0 ft-bgs: Granular Bentonite.
1045.0									
1040.0	Stiff, gray, SILTY CLAY, little Sand, little to trace gravel.		1	DPT	0.5	56 / 60	10.0-15.0 ft-bgs: Stiff, medium dark gray (N4), SILTY CLAY, little medium to coarse Sand, trace fine Gravel, moist (ML-CL). Sampled collected 12.0-14.0 ft.		
1035.0			2	DPT	0.3	58 / 60	15.0-20.0 ft-bgs: Stiff, medium dark gray (N4), SILTY CLAY, little fine to medium Gravel, little medium to coarse Sand, moist (ML-CL). Sampled collected 18.0-20.0 ft.		
1030.0							20.0-22.0 ft-bgs: Not Sampled.		20.0-26.0 ft-bgs: Clean, fine to coarse sand filter.
			3	DPT	0.6	58 / 60	22.0-27.0 ft-bgs: Stiff, medium dark gray (N4), SILTY CLAY, little fine to medium Gravel, little medium to coarse Sand, moist (ML-CL). Sampled collected 24.0-26.0 ft.		21.0-26.0 ft-bgs: 1.5-inch pre-packed PVC well screen with filter (20/40 sand).

LITHOLOGY LEGEND



USCS Low Plasticity Silty Clay (CL-ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012




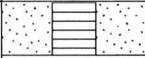
BOREHOLE LOG: MW-30 (MIP-05/LIF-17/SB-16)

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 26
DEPTH OF SOIL DRILL: 26
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473267.46 E: 4685592.54
GROUND SURFACE ELEV.: 1050.35
DATUM: N/A
START DATE/TIME: 5/3/2012
END DATE/TIME: 5/3/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION				Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %			
1025.0	Stiff, gray, SILTY CLAY, little Sand, little to trace gravel.		3	DPT	0.6	58 / 60			
1020.0									
1015.0									
1010.0									
1005.0									

LITHOLOGY LEGEND



USCS Low Plasticity Silty
Clay (CL-ML)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012




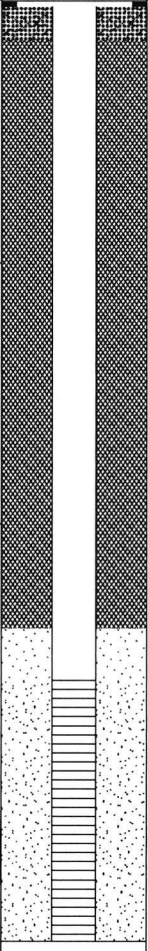



BOREHOLE LOG: MW-31 (MIP-15/SB-01)

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 18
DEPTH OF SOIL DRILL: 18
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473267.04 E: 4685852.18
GROUND SURFACE ELEV.: 1050.76
DATUM: N/A
START DATE/TIME: 5/3/2012
END DATE/TIME: 5/3/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Concrete		1	DPT	28.2	44 / 60	0.0-0.7 ft-bgs: Concrete 0.7-2.25 ft-bgs: Compact, moderate brown (5YR 4/4), medium to coarse SAND, wet (SW). 2.25-3.5 ft-bgs: Stiff, olive black (5Y 2/1), SANDY SILT, some medium to coarse Sand, moist (SM). 3.5-5.0 ft-bgs: Stiff, olive gray (5Y 4/1), SILTY CLAY, some medium to coarse Sand, moist (ML-CL). Sampled collected 2.0-4.0 ft.		Steel flush mount with locking cap. 0.0-0.75 ft-bgs: Concrete seal. 0.75-12.0 ft-bgs: Granular Bentonite.
	Compact, moderate brown, medium to coarse SAND.								
	Stiff, olive black, SANDY SILT, some Sand.								
	Very stiff to firm, gray to brown to black, SILTY CLAY, trace gravel, trace to some Sand, trace clay.								
1045.0			2	DPT	52.0	47 / 60	5.0-7.75 ft-bgs: Stiff, medium bluish gray (5B 5/1), SILTY CLAY, little medium Sand, slightly moist (ML-CL). 7.75-10.0 ft-bgs: Stiff, moderate yellowish brown (10YR 5/4), mottled medium light gray (NG) SILTY CLAY, trace medium Sand, slightly moist (ML-CL). Sampled collected 7.0-9.0 ft.		
1040.0			3	DPT	38.1	60 / 60	10.0-11.0 ft-bgs: Stiff, mottled moderate yellowish brown (10YR 5/4) and medium light gray (NG), SILTY CLAY, trace medium Sand, slightly moist (ML-CL). 11.0-11.2 ft-bgs: Compact, grayish brown (5YR 3/2), medium to coarse SILTY SAND, trace Clay, wet (SM). 11.2-13.0 ft-bgs: Stiff, moderate yellowish brown (10 YR 5/4) mottled medium light gray (N6) and moderate brown (5YR 3/4) SILTY CLAY, trace medium Sand, trace fine Gravel, slightly moist (ML-CL). 13.0-15.0 ft-bgs: Very stiff, moderate brown (5YR 3/4) and medium light gray (N6) mottled black (N1) SILTY CLAY, trace medium to coarse Sand, slightly moist (ML-CL). 15.0-18.0 ft-bgs: Firm, mottled olive gray (5Y 4/3) and medium gray (N5), SILTY CLAY, trace medium to coarse Sand, slightly moist (ML-CL). 18.0-20.0 ft-bgs: Stiff, dark gray (N3), SILTY CLAY, trace medium to coarse Sand, slightly moist (ML-CL). Sampled collected 15.0-17.0 ft.		12.0-18.0 ft-bgs: Clean, fine to coarse sand filter. 13.0-18.0 ft-bgs: 1.5-inch pre-packed PVC well screen with filter (20/40 sand).
1035.0			4	DPT	46.5	29 / 60			
1030.0			5	DPT	3.1	42 / 60	20.0-25.0 ft-bgs: Stiff, dark gray (N3), SILTY CLAY, trace fine Gravel, trace medium to coarse Sand, slightly moist (ML-CL).		

LITHOLOGY LEGEND



Concrete
USCS Low Plasticity Silty Clay (CL-ML)



USCS Well-graded Sand (SW)
USCS Sandy Silt (MLS)



USCS Silty Sand (SM)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012






BOREHOLE LOG: MW-31 (MIP-15/SB-01)

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 18
DEPTH OF SOIL DRILL: 18
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473267.04 E: 4685852.18
GROUND SURFACE ELEV.: 1050.76
DATUM: N/A
START DATE/TIME: 5/3/2012
END DATE/TIME: 5/3/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1025.0	Very stiff to firm, gray to brown to black, SILTY CLAY, trace gravel, trace to some Sand, trace clay.		6	DPT	7.2	36 / 60	25.0-30.0 ft-bgs: Stiff, dark gray (N3), SILTY CLAY, trace fine Gravel, trace medium to coarse Sand, slightly moist.		
1020.0			7	DPT	0.5	48 / 48	30.0-33.0 ft-bgs: Stiff, dark gray (N3), SILTY CLAY, trace fine Gravel, trace medium to coarse Sand, slightly moist. 33.0-34.0 ft-bgs: Harde, pale yellowish brown (10YR 6/2), SANDY SILT, little Clay, trace fine Gravel, dry.		
	Hard, yellowish brown, SANDY SILT, little Clay, trace Gravel.						Sampled collected 31.0-33.0 ft.		
1015.0									
1010.0									
1005.0									

LITHOLOGY LEGEND



Concrete
USCS Low Plasticity Silty Clay (CL-ML)



USCS Well-graded Sand (SW)
USCS Sandy Silt (MLS)



USCS Silty Sand (SM)

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: MWD

LOGGED BY: JRT
LOGGED BY DATE: 5/15/2012
CHECKED BY: ATK
CHECKED BY DATE: 8/3/2012



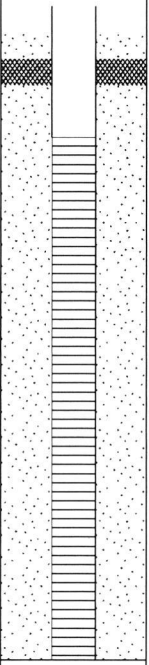
BOREHOLE LOG: MW-32

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473470.41 E: 4685562.21
GROUND SURFACE ELEV.: 1050.8
DATUM: N/A
START DATE/TIME: 11/10/2012 10:48:00 AM
END DATE/TIME: 11/10/2012 11:18:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0							No samples taken.		Steel flush mount with locking cap. 1-1.5 ft-bgs: Sand. 1.5-2.0 ft-bgs: Bentonite Seal 2.0-13.0 ft-bgs: Clean, fine to coarse sand filter. 3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1045.0									
1040.0									
1035.0									
1030.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



BOREHOLE LOG: MW-33

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473370.18 E: 4685559.08
GROUND SURFACE ELEV.: 1050.77
DATUM: N/A
START DATE/TIME: 11/10/2012 11:22:00 AM
END DATE/TIME: 11/10/2012 12:08:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0							No samples taken.		Steel flush mount with locking cap. 1-1.5 ft-bgs: Sand. 1.5-2.0 ft-bgs: Bentonite Seal 2.0-13.0 ft-bgs: Clean, fine to coarse sand filter. 3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1045.0									
1040.0									
1035.0									
1030.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



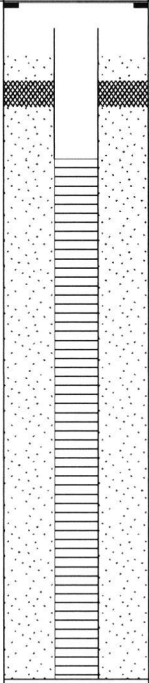
BOREHOLE LOG: MW-35

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473323.61 E: 4685603.22
GROUND SURFACE ELEV.: 1050.76
DATUM: N/A
START DATE/TIME: 11/10/2012 12:05:00 PM
END DATE/TIME: 11/10/2012 1:45:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Alt. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0							No samples taken.		Steel flush mount with locking cap. 1-1.5 ft-bgs: Sand. 1.5-2.0 ft-bgs: Bentonite Seal 2.0-13.0 ft-bgs: Clean, fine to coarse sand filter. 3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1045.0									
1040.0									
1035.0									
1030.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



BOREHOLE LOG: MW-36D

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 20
DEPTH OF SOIL DRILL: 20
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473298.22 E: 4685631.45
GROUND SURFACE ELEV.: 1050.79
DATUM: N/A
START DATE/TIME: 11/10/2012 1:42:00 PM
END DATE/TIME: 11/10/2012 3:10:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0							No samples taken.		Steel flush mount with locking cap.
									1-1.5 ft-bgs: Sand.
									1.5-13.5 ft-bgs: Bentonite Seal
1045.0									
1040.0									
1035.0									13.5-20.0 ft-bgs: Clean, fine to coarse sand filter.
									15.0-20.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1030.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



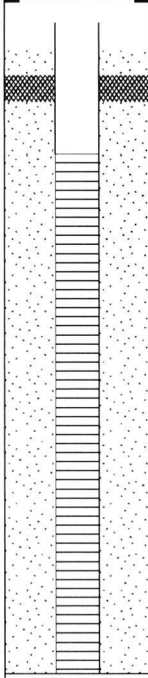
BOREHOLE LOG: MW-36S

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473298.34 E: 4685634.17
GROUND SURFACE ELEV.: 1050.77
DATUM: N/A
START DATE/TIME: 11/10/2012 2:15:00 PM
END DATE/TIME: 11/10/2012 3:15:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0							No samples taken.		Steel flush mount with locking cap. 1-1.5 ft-bgs: Sand. 1.5-2.0 ft-bgs: Bentonite Seal 2.0-13.0 ft-bgs: Clean, fine to coarse sand filter. 3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1045.0									
1040.0									
1035.0									
1030.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



BOREHOLE LOG: MW-37

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473321.97 E: 4685497.68
GROUND SURFACE ELEV.: 1050.33
DATUM: N/A
START DATE/TIME: 11/13/2012 12:30:00 PM
END DATE/TIME: 11/13/2012 1:03:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0							No samples taken.		Steel flush mount with locking cap.
									0.5-1.0 ft-bgs: Sand.
									1.0-2.0 ft-bgs: Bentonite Seal
1045.0									2.0-13.0 ft-bgs: Clean, fine to coarse sand filter.
									3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1040.0									
1035.0									
1030.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



BOREHOLE LOG: MW-38

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473260.07 E: 4685460.75
GROUND SURFACE ELEV.: 1050.01
DATUM: N/A
START DATE/TIME: 11/13/2012 10:56:00 AM
END DATE/TIME: 11/13/2012 11:45:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Alt. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0							No samples taken.		Steel flush mount with locking cap.
									0.5-1.0 ft-bgs: Sand.
									1.0-2.0 ft-bgs: Bentonite Seal
1045.0									2.0-13.0 ft-bgs: Clean, fine to coarse sand filter.
									3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1040.0									
1035.0									
1030.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



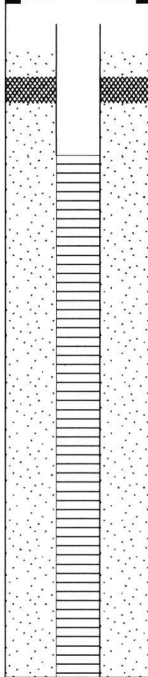
BOREHOLE LOG: MW-39

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473224.81 E: 4685542.24
GROUND SURFACE ELEV.: 1049.82
DATUM: N/A
START DATE/TIME: 11/10/2012 4:30:00 PM
END DATE/TIME: 11/10/2012 6:05:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0							No samples taken.		Steel flush mount with locking cap. 1-1.5 ft-bgs: Sand. 1.5-2.0 ft-bgs: Bentonite Seal 2.0-13.0 ft-bgs: Clean, fine to coarse sand filter. 3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1040.0									
1035.0									
1030.0									
1025.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette

GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



PAGE 1 of 1

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

[illegible]

LITHOLOGY LEGEND



Golder Associates

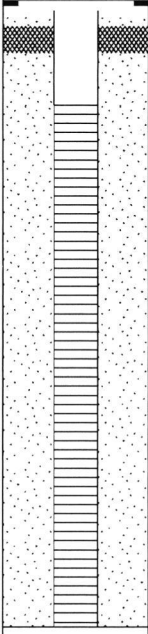
BOREHOLE LOG: MW-41

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 12
DEPTH OF SOIL DRILL: 12
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473242.68 E: 4685657.91
GROUND SURFACE ELEV.: 1047.09
DATUM: N/A
START DATE/TIME: 11/13/2012 10:12:00 AM
END DATE/TIME: 11/13/2012 10:45:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0							No samples taken.		Steel flush mount with locking cap. 0.3-0.5 ft-bgs: Sand. 0.5-1.0 ft-bgs: Bentonite Seal 1.0-12.0 ft-bgs: Clean, fine to coarse sand filter. 2.0-12.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1040.0									
1035.0									
1030.0									
1025.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



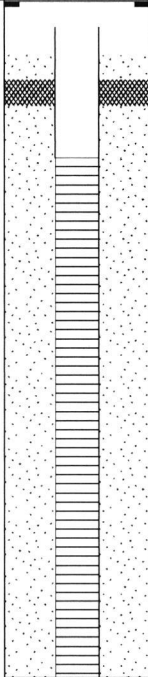
BOREHOLE LOG: MW-42

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473212.97 E: 4685629.19
GROUND SURFACE ELEV.: 1049.47
DATUM: N/A
START DATE/TIME: 11/10/2012 10:05:00 AM
END DATE/TIME: 11/10/2012 10:35:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0							No samples taken.		Steel flush mount with locking cap. 1-1.5 ft-bgs: Sand. 1.5-2.0 ft-bgs: Bentonite Seal 2.0-13.0 ft-bgs: Clean, fine to coarse sand filter. 3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1040.0									
1035.0									
1030.0									
1025.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013




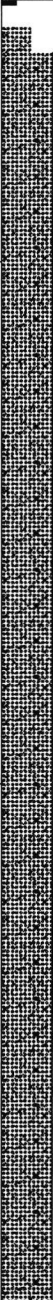



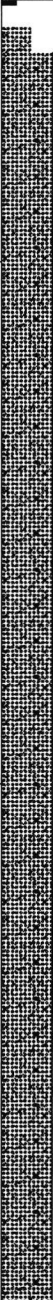

BOREHOLE LOG: MW-43D

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 42
DEPTH OF SOIL DRILL: 42
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473176.37 E: 4685723.58
GROUND SURFACE ELEV.: 1048.93
DATUM: N/A
START DATE/TIME: 11/14/2012
END DATE/TIME: 11/16/2012

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: Sonic

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0	Concrete		1	S	0	5 / 5	0.0-0.5 ft.: Concrete 0.5-1.1 ft.: Soft, brown, fine Gravelly Silty CLAY. 1.1-5.0 ft.: Firm, brown, clayey SILT with trace fine to medium Gravel.		8-inch steel flush mount casing. 0.5-1.0 ft.: Cement 0.0-32.0 ft-bgs: Cement grout, 10-inch diameter borehole to 32 ft. Installed 6-inch diameter steel casing in a 10-inch diameter borehole - grouted to surface and let set for >24 hours. Advanced 4-inch diameter boring through the steel casing and set a 2-inch PVC well to 42 ft-bgs.
	Soft, brown, fine Gravelly Silty CLAY.								
	Firm, brown, clayey SILT with trace fine to medium Gravel.								
1040.0	Firm to stiff, brown, Silty CLAY with trace fine to medium gravel, mottled.		2	S	0	10 / 10	5.0-14.3 ft.: Firm to stiff, brown, Silty CLAY with trace fine to medium gravel, mottled. 14.3-15.0 ft.: Stiff to hard, gray, Silty CLAY with trace fine to medium Gravel, mottled, massive.		
1035.0	Stiff to hard, gray, Silty CLAY with trace fine to medium Gravel, mottled, massive.		3	S	0	10 / 10	15.0-25.0 ft.: Stiff to hard, gray, Silty CLAY with trace fine to medium Gravel, mottled, massive.		
1025.0									

LITHOLOGY LEGEND



Concrete



USCS Low Plasticity Clay
(CL)



USCS Silt (ML)

USCS Clayey Sand (SC)

DRILLING COMPANY: Boart-Longyear
DRILLER: B. Beunings
GOLDER INSPECTOR: CWA

LOGGED BY: MRH
LOGGED BY DATE: 1/25/2013
CHECKED BY: NSC
CHECKED BY DATE: 1/25/2013












BOREHOLE LOG: MW-43D

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 42
DEPTH OF SOIL DRILL: 22
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473176.37 E: 4685723.58
GROUND SURFACE ELEV.: 1048.93
DATUM: N/A
START DATE/TIME: 11/14/2012
END DATE/TIME: 11/16/2012

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: Sonic

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1020.0	Stiff to hard, gray, Silty CLAY with trace fine to medium Gravel, mottled, massive.		4	S	0	5 / 5	25.0-29.0 ft.: Stiff to hard, gray, Silty CLAY with trace fine to medium Gravel, mottled, massive. 29.0-30.0 ft.: Loose, yellow, clayey fine to coarse SAND with trace fine to medium Gravel, moist. Grab sample collected at 29.5 ft.		0.0-32.0 ft-bgs: Cement grout, 10-inch diameter borehole to 32 ft. Installed 6-inch diameter steel casing in a 10-inch diameter borehole - grouted to surface and let set for >24 hours. Advanced 4-inch diameter boring through the steel casing and set a 2-inch PVC well to 42 ft-bgs.	
	Loose, yellow, clayey fine to coarse SAND with trace fine to medium Gravel, moist, iron oxide staining at 32 ft.								32.0-34.0 ft-bgs: Bentonite Seal	
1015.0	Compact, yellow-brown, Clayey fine to medium Gravelly fine to medium SAND, moist.		5	S		12 / 12	30.0-34.2 ft.: Loose, yellow, clayey fine to coarse SAND with trace fine to medium Gravel, moist, iron oxide staining at 32 ft. 34.2-37.4 ft.: Compact, yellow-brown, Clayey fine to medium Gravelly fine to medium SAND, moist. 37.4-39.3 ft.: Compact, yellow-brown, Clayey fine to coarse Gravelly fine to medium SAND, dry, mottled. 39.3-39.8 ft.: Soft, tan, fine to coarse gravelly SAND, some Clay, moist. 39.8-40.3 ft.: Soft, tan, fine Sandy SILT, some Clay, moist. 40.3-41.2 ft.: Loose, brown-tan, fine SAND, some Clay, moist. 41.2-42.0 ft.: Compact, brown, fine SAND with some Clay, trace fine Gravel, mottled, dry. Grab sample collected at 41.5 ft.		34.0-42.0 ft-bgs: Sand filter pack.	
1010.0	Compact, yellow-brown, Clayey fine to coarse Gravelly fine to medium SAND, dry, mottled.								36.0-41.0 ft-bgs.: 2-inch PVC screen.	
	Soft, tan, fine sandy SILT, some Clay, moist.									
	Soft, tan, fine Sandy SILT, some Clay, moist.									
	Loose, brown-tan, fine SAND, some Clay, moist.									
	Compact, brown, fine SAND with some Clay, trace fine Gravel, mottled, dry.									
1005.0										
1000.0										

LITHOLOGY LEGEND



Concrete



USCS Low Plasticity Clay (CL)



USCS Silt (ML)



USCS Clayey Sand (SC)

DRILLING COMPANY: Boart-Longyear
DRILLER: B. Beunings
GOLDER INSPECTOR: CWA

LOGGED BY: MRH
LOGGED BY DATE: 1/25/2013
CHECKED BY: NSC
CHECKED BY DATE: 1/25/2013



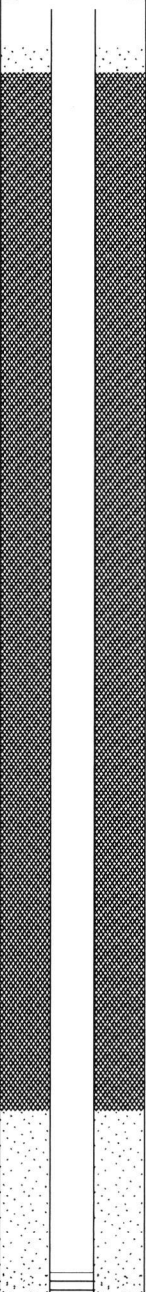
BOREHOLE LOG: MW-43I

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 30
DEPTH OF SOIL DRILL: 30
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473181.87 E: 4685723.4
GROUND SURFACE ELEV.: 1049.04
DATUM: N/A
START DATE/TIME: 11/9/2012 4:42:00 PM
END DATE/TIME: 11/10/2012 8:50:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1045.0								No samples taken.		Steel flush mount with locking cap. 1-1.5 ft-bgs: Sand. 1.5-21.4 ft-bgs: Bentonite Seal

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



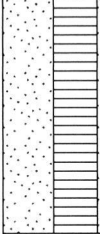
BOREHOLE LOG: MW-43I

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 30
DEPTH OF SOIL DRILL: 30
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473181.87 E: 4685723.4
GROUND SURFACE ELEV.: 1049.04
DATUM: N/A
START DATE/TIME: 11/9/2012 4:42:00 PM
END DATE/TIME: 11/10/2012 8:50:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1020.0									21.4-29.5 ft-bgs: Clean, fine to coarse sand filter. 24.5-29.5 ft-bgs: 1.5-inch pre-packed PVC well screen.
1015.0									
1010.0									
1005.0									
1000.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



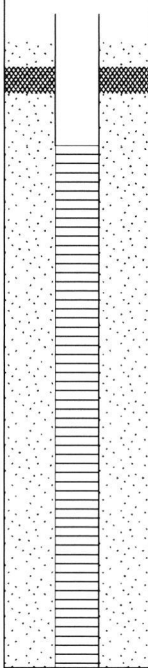
BOREHOLE LOG: MW-43S

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473184.15 E: 4685723.36
GROUND SURFACE ELEV.: 1049.13
DATUM: N/A
START DATE/TIME: 11/10/2012 7:48:00 AM
END DATE/TIME: 11/10/2012 7:55:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0							No samples taken.		Steel flush mount with locking cap. 1-1.5 ft-bgs: Sand. 1.5-2.0 ft-bgs: Bentonite Seal 2.0-13.0 ft-bgs: Clean, fine to coarse sand filter. 3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1040.0									
1035.0									
1030.0									
1025.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette

GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



BOREHOLE LOG: MW-44

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 22
DEPTH OF SOIL DRILL: 22
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473164.35 E: 4685836.07
GROUND SURFACE ELEV.: 1048.38
DATUM: N/A
START DATE/TIME: 11/10/2012 8:58:00 AM
END DATE/TIME: 11/10/2012 9:50:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0							No samples taken.		Steel flush mount with locking cap. 1-2.0 ft-bgs: Sand. 2.0-14.8 ft-bgs: Bentonite Seal
1040.0									
1035.0									14.8-22.0 ft-bgs: Clean, fine to coarse sand filter.
1030.0									17.0-22.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1025.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette

GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013







BOREHOLE LOG: MW-45

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 29.5
DEPTH OF SOIL DRILL: 29.5
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473286.98 E: 4685718.68
GROUND SURFACE ELEV.: 1050.68
DATUM: N/A
START DATE/TIME: 11/13/2012
END DATE/TIME: 11/13/2012

DRILLING METHOD: Roto Sonic
CORING METHOD: N/A
DRILL RIG: Sonic

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Alt. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	GRAVEL (Fill).								8-inch steel flush mount casing. 0.0-19.5 ft-bgs: Cement grout, 10-inch diameter borehole to 20 ft. Installed 6-inch diameter steel casing in a 10-inch diameter borehole - grouted to surface and let set for >24 hours. Advanced 4-inch diameter boring through the steel casing and set a 2-inch PVC well to 29.5 ft-bgs.
	Firm, brown, Sandy, Clayey SILT, moist.		1	S	1	5 / 5	0.0-1.0 ft.: GRAVEL (Fill). 1.0-5.0 ft.: Firm, brown, Sandy, Clayey SILT, moist.		
					0				
1045.0	Firm, brown, fine to coarse Sandy CLAY with trace fine to coarse Gravel, moist.		2	S	30.9	5 / 5	5.0-10.0 ft.: Firm, brown, fine to coarse Sandy CLAY with trace fine to coarse Gravel, moist.		
					53.8				
1040.0			3	S	349.2	5 / 5	10.0-14.9 ft.: Firm, brown, fine to coarse Sandy CLAY with trace fine to coarse Gravel, moist. 14.9-15.0 ft.: Stiff to hard, Gray, Silty CLAY with trace fine to medium Gravel, moist.		19.5-21.5 ft-bgs: Bentonite Seal, 6-inch diameter borehole to 29.5 ft.
					2968				
1035.0	Stiff to hard, Gray, Silty CLAY with trace fine to medium Gravel, moist.		4	S	327	5 / 5	15.0-20.0 ft.: Stiff to hard, Gray, Silty CLAY with trace fine to medium Gravel, moist.		
					232				21.5-29.5 ft-bgs: Sand filter pack.
1030.0			5	S	1.9	9.5 / 9.5	20.0-29.5 ft.: Stiff to hard, Gray, Silty CLAY with trace fine to medium Gravel, moist.		

LITHOLOGY LEGEND



USCS Well-graded Gravel (GW)



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Boart-Longyear
DRILLER: B. Beunings
GOLDER INSPECTOR: CWA

LOGGED BY: MRH
LOGGED BY DATE: 1/25/2013
CHECKED BY: NSC
CHECKED BY DATE: 1/25/2013





BOREHOLE LOG: MW-45

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 29.5
DEPTH OF SOIL DRILL: 29.5
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473286.98 E: 4685718.68
GROUND SURFACE ELEV.: 1050.68
DATUM: N/A
START DATE/TIME: 11/13/2012
END DATE/TIME: 11/13/2012

DRILLING METHOD: Roto Sonic
CORING METHOD: N/A
DRILL RIG: Sonic

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1025.0	Stiff to hard, Gray, Silty CLAY with trace fine to medium Gravel, moist.		5	S	1.9	9.5 / 9.5	20.0-29.5 ft.: Stiff to hard, Gray, Silty CLAY with trace fine to medium Gravel, moist.		23.5-28.5 ft-bgs.: 2-inch PVC screen with sand pack.
1020.0									
1015.0									
1010.0									
1005.0									

LITHOLOGY LEGEND



USCS Well-graded Gravel
(GW)



USCS Low Plasticity Clay
(CL)



USCS Low Plasticity Sandy
Clay (CLS)

DRILLING COMPANY: Boart-Longyear
DRILLER: B. Beunings
GOLDER INSPECTOR: CWA

LOGGED BY: MRH
LOGGED BY DATE: 1/25/2013
CHECKED BY: NSC
CHECKED BY DATE: 1/25/2013



BOREHOLE LOG: MW-46

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 42
DEPTH OF SOIL DRILL: 22
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473280.8 E: 4685718.58
GROUND SURFACE ELEV.: 1050.68
DATUM: N/A
START DATE/TIME: 11/13/2012
END DATE/TIME: 11/13/2012

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: Sonic

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	0.0-0.5 ft.: GRAVEL Soft, brown, sandy Clayey SILT, moist, mottling at base.		1	S	0	5 / 5	0.0-0.5 ft.: GRAVEL 0.5-5.0 ft.: Soft, brown, sandy Clayey SILT, moist, mottling at base.		8-inch steel flush mount casing. 0.0-32.0 ft-bgs: Cement grout. Advanced 12-inch diameter temporary steel casing to approximately 22 ft-bgs, then drilled a 10-inch diameter borehole through the 12-inch diameter casing to an approximate depth of 32 ft-bgs. Set a 6-inch diameter steel casing and grouted to surface, let the grout cure for >24 hours, then advanced a 4-inch diameter borehole through the 6-inch diameter steel casing to set the PVC well.
1045.0	6.5-14.2 ft.: Firm, red-brown, Silty fine Sandy CLAY with trace fine to coarse Gravel, iron oxide staining. 14.2-15.0 ft.: Stiff, gray, fine to medium Sandy CLAY with trace fine to coarse Gravel, moist, massive.				0.7				
1040.0	Stiff, gray, fine to medium Sandy CLAY with trace fine to coarse Gravel, moist, massive.				6.8		5.0-6.5 ft.: Soft, brown, Sandy Clayey SILT, moist, mottling at base. 6.5-14.2 ft.: Firm, red-brown, Silty fine Sandy CLAY with trace fine to coarse Gravel, iron oxide staining. 14.2-15.0 ft.: Stiff, gray, fine to medium Sandy CLAY with trace fine to coarse Gravel, moist, massive.		
1035.0			2	S	672	10 / 10			
1030.0					3.1		15.0-25.0 ft.: Stiff, gray, fine to medium Sandy CLAY with trace fine to coarse Gravel, moist, massive.		
			3	S	2.6				

LITHOLOGY LEGEND



USCS Well-graded Gravel (GW)
USCS Clayey Sand (SC)



USCS Low Plasticity Clay (CL)
USCS Poorly-graded Sand (SP)



USCS Low Plasticity Sandy Clay (CLS)

DRILLING COMPANY: Boart Longyear
DRILLER: B. Beunings
GOLDER INSPECTOR: CWA

LOGGED BY: MRH
LOGGED BY DATE: 1/25/2013
CHECKED BY: NSC
CHECKED BY DATE: 1/25/2013



BOREHOLE LOG: MW-46

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 42
DEPTH OF SOIL DRILL: 42
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473280.8 E: 4685718.58
GROUND SURFACE ELEV.: 1050.68
DATUM: N/A
START DATE/TIME: 11/13/2012
END DATE/TIME: 11/13/2012

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: Sonic

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1025.0	Stiff, gray, fine to medium Sandy CLAY with trace fine to coarse Gravel, moist, massive.		4	S	1.2	6.5 / 6.5	25.0-30.8 ft.: Stiff, gray, fine to medium Sandy CLAY with trace fine to coarse Gravel, moist, massive. 30.8-31.5 ft.: Compact, yellow-brown Clayey, Silty, fine to medium SAND, trace fine gravel, mottled, moist. Grab sample collected at 31.5 ft.		
1020.0	Compact, yellow-brown Clayey, Silty, fine to medium SAND, trace fine gravel, mottled, moist.				0				
1015.0	Firm, brown, Clayey SILT. Firm, yellow-brown, fine to coarse Sandy CLAY with trace gravel, dry. Compact, brown, fine to medium SAND, moist.		5	S	2.7	10.5 / 10.5	31.5-38.9 ft.: Compact, yellow-brown Clayey, Silty, fine to medium SAND, trace fine gravel, mottled, moist. 38.9-39.3 ft.: Firm, brown, Clayey SILT. 39.3-39.8 ft.: Firm, yellow-brown, fine to coarse Sandy CLAY with trace gravel, dry. 39.8-42.0 ft.: Compact, brown, fine to medium SAND, moist. Grab sample collected at 41.5 ft.		32.0-34.0 ft-bgs: Bentonite Seal, 6 inch diameter borehole to 42 ft. 34-42.0 ft-bgs: Sand filter pack. 36.0-41.0 ft-bgs: 2-inch PVC screen with sand pack.
1010.0					27.5				
1005.0									

LITHOLOGY LEGEND



USCS Well-graded Gravel (GW)
USCS Clayey Sand (SC)



USCS Low Plasticity Clay (CL)
USCS Poorly-graded Sand (SP)



USCS Low Plasticity Silty Clay (CLS)

DRILLING COMPANY: Boart Longyear
DRILLER: B. Beunings
GOLDER INSPECTOR: CWA

LOGGED BY: MRH
LOGGED BY DATE: 1/25/2013
CHECKED BY: NSC
CHECKED BY DATE: 1/25/2013







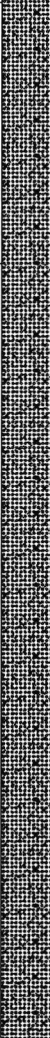


BOREHOLE LOG: MW-47D

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 43
DEPTH OF SOIL DRILL: 43
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473365.95 E: 4685731.2
GROUND SURFACE ELEV.: 1050.78
DATUM: N/A
START DATE/TIME: 11/12/2012
END DATE/TIME: 11/14/2012

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: Sonic

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Concrete at ground surface Fine to coarse SAND. Brown SILTY CLAY with Gravel. Blocky structure.	 	1	S	0.5	5 / 5	0.0-0.4 ft: Concrete. 0.4-1.0 ft.: Loose, fine to coarse SAND. 1.0-2.5 ft.: Firm, brown Silty CLAY with trace Gravel. Blocky structure. 2.5-5.0 ft.: Firm, brown Silty CLAY with trace fine Gravel, mottled, platy structure, moist.		8-inch steel flush mount casing. 0.0-33.0 ft-bgs: Cement grout. Advanced 12-inch diameter temporary steel casing to approximately 22 ft-bgs, then drilled a 10-inch diameter borehole through the 12-inch diameter casing to an approximate depth of 33 ft-bgs. Set a 6-inch diameter steel casing and grouted to surface, let the grout cure for >24 hours, then advanced a 4-inch diameter borehole through the 6-inch diameter steel casing to set the PVC well.
1045.0	Brown SILTY CLAY with Gravel, mottled, massive, moist.		2	S	25 234	10 / 10	5.0-10.0 ft.: Firm, brown Silty CLAY with trace fine to medium Gravel, mottled, massive, moist. 10.0-15.0 ft.: Firm, brown Silty CLAY, with trace fine to medium Gravel, mottled, massive, strong odor, moist.		
1040.0									
1035.0	Gray SILTY CLAY with Gravel, mottled, massive, moist.		3	S	78	10 / 10	15.0-20.0 ft.: Stiff, gray, Silty CLAY with trace fine to medium Gravel, mottled, massive, moist. 20.0-25.0 ft.: Stiff, gray, Silty CLAY, with trace fine to medium Gravel, mottled, massive, moist.		
1030.0					28				

LITHOLOGY LEGEND



Concrete

USCS Silty Sand (SM)



Fill (made ground)
USCS Clayey Sand (SC-SM)



USCS Low Plasticity Clay (CL)
USCS Poorly-graded Gravel (GP)

DRILLING COMPANY: Boart-Longyear
DRILLER: B. Beunings
GOLDER INSPECTOR: CWA

LOGGED BY: MRH
LOGGED BY DATE: 1/25/2013
CHECKED BY: NSC
CHECKED BY DATE: 1/25/2013



BOREHOLE LOG: MW-47D

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 43
DEPTH OF SOIL DRILL: 43
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473365.95 E: 4685731.2
GROUND SURFACE ELEV.: 1050.78
DATUM: N/A
START DATE/TIME: 11/12/2012
END DATE/TIME: 11/14/2012

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: Sonic

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PLD (ppm)	Soil Rec./Alt. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1025.0	Gray SILTY CLAY with Gravel, mottled, massive, moist.		4	S	29	8 / 8	25.0-31.0 ft.: Stiff, gray, Silty CLAY with trace fine to medium gravel, massive, moist. 31.0-33.0 ft.: Compact, yellow-brown, Silty CLAY with trace fine to medium Sand, trace fine to coarse Gravel, mottled, strong odor, moist.		
1020.0	Yellow-brown, Silty CLAY with fine to medium Sand, trace fine to coarse Gravel, mottled, strong odor, moist.				345				
1015.0	Gray Silty fine to medium SAND, wet.		5	S	489	10 / 10	33.0-34.2 ft.: Loose, yellow-brown, Silty CLAY with trace fine to medium Sand, trace fine to coarse Gravel, mottled, strong odor, moist. 34.2-34.7 ft.: Loose, gray Silty fine to medium SAND, wet. 34.7-37.6 ft.: Loose, brown, Silty fine to medium SAND with trace fine Gravel, wet. 37.6-39.1 ft.: Loose, yellow-brown, Clayey fine to coarse SAND with trace fine Gravel, wet. 39.1-41.8 ft.: Loose, yellow-brown, fine to coarse Sandy Coarse GRAVEL, wet. 41.8-43.0 ft.: Very Loose, yellow-brown, fine to coarse Sandy coarse GRAVEL, wet.		33.0-35.0 ft-bgs: Bentonite Seal. 6-inch diameter borehole to 43 ft. 35-43.0 ft-bgs: Sand filter pack. 37.0-42.0 ft-bgs.: 2-inch PVC screen with sand pack.
	Brown, Silty fine to medium SAND with trace fine Gravel, wet.								
	Yellow-brown, Clayey fine to coarse SAND with trace fine Gravel, wet.								
	Yellow-brown, Silty fine to coarse SAND, wet.								
1010.0	Yellow-brown, fine to coarse Sandy coarse GRAVEL, wet.				33.8				
1005.0									

LITHOLOGY LEGEND



Concrete

USCS Silty Sand (SM)



Fill (made ground)
USCS Clayey Sand (SC-SM)



USCS Low Plasticity Clay (CL)
USCS Poorly-graded Gravel (GP)

DRILLING COMPANY: Boart-Longyear
DRILLER: B. Beunings

GOLDER INSPECTOR: CWA

LOGGED BY: MRH
LOGGED BY DATE: 1/25/2013
CHECKED BY: NSC
CHECKED BY DATE: 1/25/2013



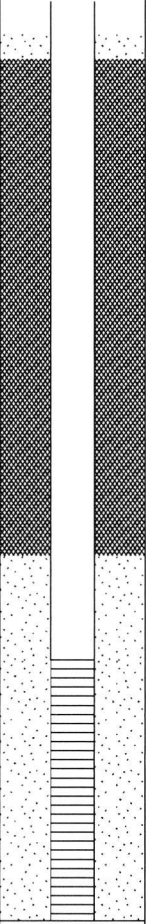
BOREHOLE LOG: MW-47S

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 18
DEPTH OF SOIL DRILL: 18
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473378.14 E: 4685731.5
GROUND SURFACE ELEV.: 1050.83
DATUM: N/A
START DATE/TIME: 11/10/2012 3:45:00 PM
END DATE/TIME: 11/10/2012 4:35:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1050.0								No samples taken.		Steel flush mount with locking cap. 1-1.5 ft-bgs: Sand. 1.5-11.0 ft-bgs: Bentonite Seal <

LITHOLOGY LEGEND

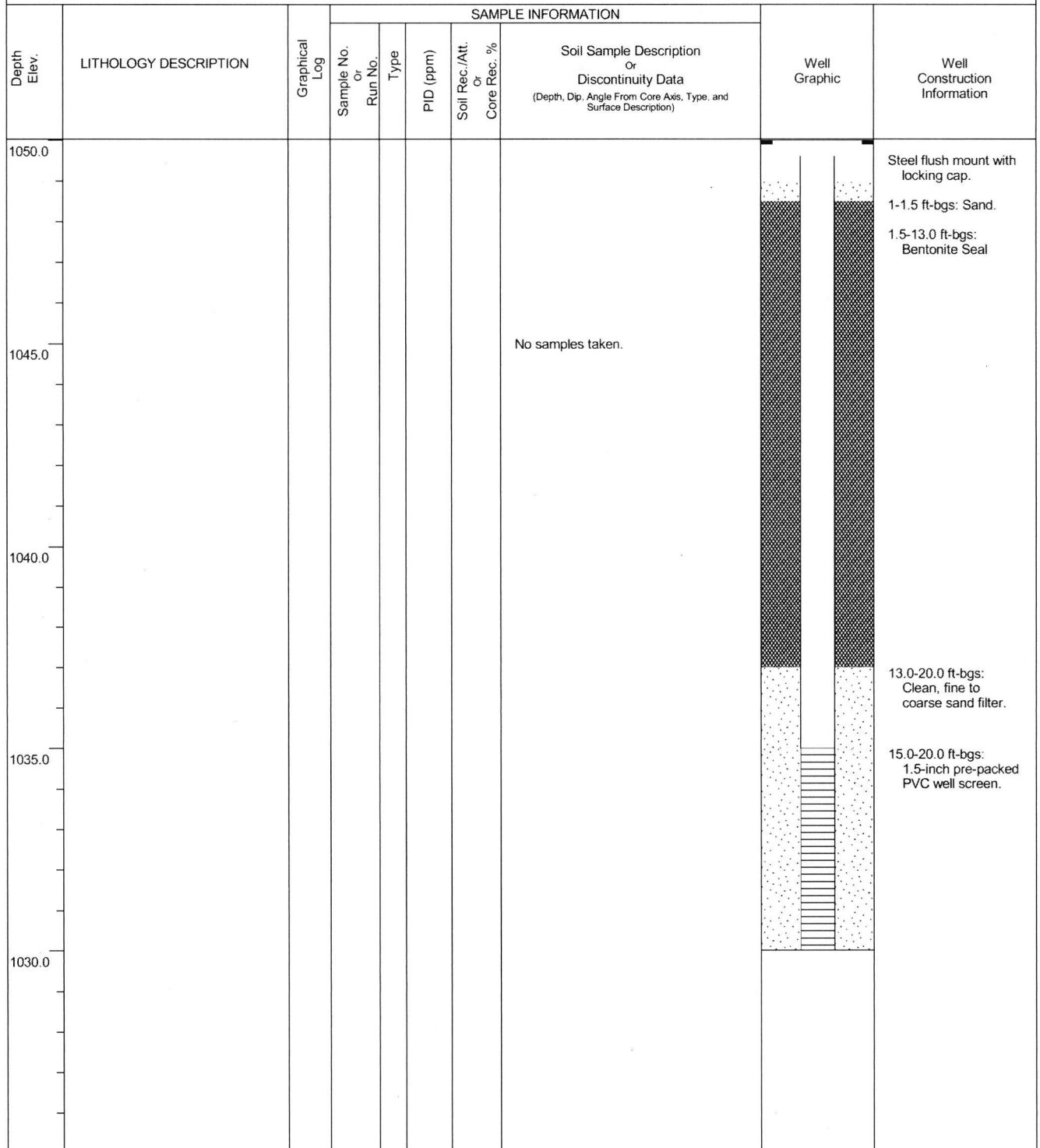
DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



PAGE 1 of 1

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600



LITHOLOGY LEGEND



**Golder
Associates**

BOREHOLE LOG: MW-49

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 17
DEPTH OF SOIL DRILL: 17
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473181.47 E: 4685490.06
GROUND SURFACE ELEV.: 1049.51
DATUM: N/A
START DATE/TIME: 11/12/2012 11:15:00 AM
END DATE/TIME: 11/12/2012 12:10:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0							No samples taken.		Steel flush mount with locking cap. 0.4-1.5 ft-bgs: Sand. 1.5-10.0 ft-bgs: Bentonite Seal
1040.0									10.0-17.0 ft-bgs: Clean, fine to coarse sand filter.
1035.0									12.0-17.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1030.0									
1025.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette

GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



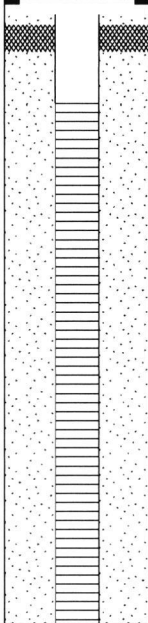
BOREHOLE LOG: MW-50

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 12
DEPTH OF SOIL DRILL: 12
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473292.49 E: 4685890.28
GROUND SURFACE ELEV.: 1048.97
DATUM: N/A
START DATE/TIME: 11/13/2012 1:25:00 PM
END DATE/TIME: 11/13/2012 2:00:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0							No samples taken.		Steel flush mount with locking cap. 0.3-0.5 ft-bgs: Sand. 0.5-1.0 ft-bgs: Bentonite Seal 1.0-12.0 ft-bgs: Clean, fine to coarse sand filter. 2.0-12.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1040.0									
1035.0									
1030.0									
1025.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



BOREHOLE LOG: MW-51

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473267.08 E: 4685937.93
GROUND SURFACE ELEV.: 1047.89
DATUM: N/A
START DATE/TIME: 11/12/2012 1:20:00 PM
END DATE/TIME: 11/12/2012 3:50:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0							No samples taken.		Raised steel protective casing. 0.4-1.0 ft-bgs: Sand. 1.0-2.0 ft-bgs: Bentonite Seal 2.0-13.0 ft-bgs: Clean, fine to coarse sand filter. 3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1040.0									
1035.0									
1030.0									
1025.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



BOREHOLE LOG: MW-52

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 12
DEPTH OF SOIL DRILL: 12
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473266.72 E: 4685892.37
GROUND SURFACE ELEV.: 1048.77
DATUM: N/A
START DATE/TIME: 11/12/2012 4:00:00 PM
END DATE/TIME: 11/12/2012 5:15:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Alt. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0							No samples taken.		Steel flush mount with locking cap. 0.5-1.0 ft-bgs: Sand. 1.0-1.5 ft-bgs: Bentonite Seal 1.5-12.0 ft-bgs: Clean, fine to coarse sand filter. 2.0-12.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1040.0									
1035.0									
1030.0									
1025.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



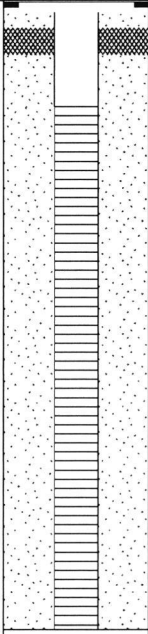
BOREHOLE LOG: MW-53

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 12
DEPTH OF SOIL DRILL: 12
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473214.02 E: 4685894.38
GROUND SURFACE ELEV.: 1049.37
DATUM: N/A
START DATE/TIME: 11/13/2012 2:40:00 PM
END DATE/TIME: 11/13/2012 3:30:00 PM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0							No samples taken.		Steel flush mount with locking cap. 0.2-0.5 ft-bgs: Sand. 0.5-1.0 ft-bgs: Bentonite Seal 1.0-12.0 ft-bgs: Clean, fine to coarse sand filter. 2.0-12.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1040.0									
1035.0									
1030.0									
1025.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette

GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



BOREHOLE LOG: MW-54 (MIP-68)

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 29
DEPTH OF SOIL DRILL: 29
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473488.99 E: 4685626.45
GROUND SURFACE ELEV.: 1050.81
DATUM: N/A
START DATE/TIME: 11/16/2012 10:50:00 AM
END DATE/TIME: 11/16/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0							No samples taken.		Steel flush mount with locking cap.
									1-1.5 ft-bgs: Sand.
									1.5-22.0 ft-bgs: Bentonite Seal
1045.0									
1040.0									
1035.0									
1030.0									22.0-29.0 ft-bgs: Clean, fine to coarse sand filter.
									24.0-29.0 ft-bgs: 1.5-inch pre-packed PVC well screen.

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



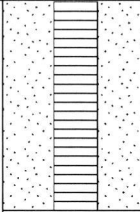
BOREHOLE LOG: MW-54 (MIP-68)

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 29
DEPTH OF SOIL DRILL: 29
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473488.99 E: 4685626.45
GROUND SURFACE ELEV.: 1050.81
DATUM: N/A
START DATE/TIME: 11/16/2012 10:50:00 AM
END DATE/TIME: 11/16/2012

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1025.0									24.0-29.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1020.0									
1015.0									
1010.0									
1005.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



BOREHOLE LOG: MW-55D (MIP-70)

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 29
DEPTH OF SOIL DRILL: 29
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473518.94 E: 4685622.68
GROUND SURFACE ELEV.: 1050.59
DATUM: N/A
START DATE/TIME: 11/13/2012 8:27:00 AM
END DATE/TIME: 11/13/2012 9:45:00 AM

DRILLING METHOD: Direct Push
CORING METHOD:
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0							No samples taken.		Steel flush mount with locking cap.
									1-1.5 ft-bgs: Sand.
									1.5-22.0 ft-bgs: Bentonite Seal
1045.0									
1040.0									
1035.0									
1030.0									
									22.0-29.0 ft-bgs: Clean, fine to coarse sand filter.
									24.0-29.0 ft-bgs: 1.5-inch pre-packed PVC well screen.

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



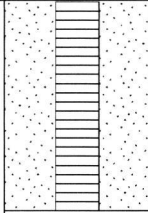
BOREHOLE LOG: MW-55D (MIP-70)

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 29
DEPTH OF SOIL DRILL: 29
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473518.94 E: 4685622.68
GROUND SURFACE ELEV.: 1050.59
DATUM: N/A
START DATE/TIME: 11/13/2012 8:27:00 AM
END DATE/TIME: 11/13/2012 9:45:00 AM

DRILLING METHOD: Direct Push
CORING METHOD:
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1025.0									24.0-29.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1020.0									
1015.0									
1010.0									
1005.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



BOREHOLE LOG: MW-55S (MIP-70)

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 13
DEPTH OF SOIL DRILL: 13
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473519.08 E: 4685625.36
GROUND SURFACE ELEV.: 1050.87
DATUM: N/A
START DATE/TIME: 11/13/2012 8:05:00 AM
END DATE/TIME: 11/13/2012 9:40:00 AM

DRILLING METHOD: Direct Push
CORING METHOD: N/A
DRILL RIG: 6600

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0							No samples taken.		Steel flush mount with locking cap.
									0.5-1.0 ft-bgs: Sand.
									1.0-2.0 ft-bgs: Bentonite Seal
1045.0									2.0-13.0 ft-bgs: Clean, fine to coarse sand filter.
									3.0-13.0 ft-bgs: 1.5-inch pre-packed PVC well screen.
1040.0									
1035.0									
1030.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Matrix Environmental
DRILLER: G. Paquette
GOLDER INSPECTOR: JSP

LOGGED BY: MRH
LOGGED BY DATE: 11/30/2012
CHECKED BY: NSC
CHECKED BY DATE: 1/28/2013



BOREHOLE LOG: MW-56D

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 39
DEPTH OF SOIL DRILL: 39
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473198.6 E: 4685938.54
GROUND SURFACE ELEV.: 1047.76
DATUM: N/A
START DATE/TIME: 2/27/2013 12:20:00 PM
END DATE/TIME: 2/27/2013 1:40:00 PM

DRILLING METHOD: Sonic
CORING METHOD: N/A
DRILL RIG: CDD 1415

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0	Stiff, red-brown to brown, SILT and CLAY, some sand, none to some gravel, dry to moist.		1	S	0.4 0.2	5 / 5	0.0-2.0 ft-bgs: Soft, dark gray, SILT, some sand, moist (CL). 2.0-5.0 ft-bgs: Stiff, brown to gray, SILT and CLAY, some sand, trace gravel, moist (CL).		6-inch steel surface casing to 2.6 ft above ground. Bollards placed around well for protection. 0.0-29.0 ft-bgs: Cement grout. Installed 6-inch diameter steel casing in a 10-inch diameter borehole to 29.0 ft-bgs - grouted to surface and let set for >24 hours. Advanced 4-inch diameter boring through the steel casing and set a 2-inch PVC well to 38 ft-bgs.
1040.0			2	S	0.2 0.2	5 / 5	5.0-10.0 ft-bgs: Stiff, red to brown, SILT and CLAY, some sand, trace gravel, dry (CL).		
1035.0			3	S	0.2 0.1	5 / 5	10.0-13.0 ft-bgs: Stiff, brown, SILT and CLAY, some sand, trace gravel, moist (CL). 13.0-15.0 ft-bgs: Dense, gray, SILT, some sand, wet (ML).		
1030.0	Loose to dense, gray, SILT, some sand, trace to some gravel, moist to wet.		4	S	0.1 0.1	5 / 5	15.0-20.0 ft-bgs: Dense, gray, SILT, some sand, some gravel, moist (ML).		
1025.0	Stiff, gray, SILT and CLAY, some sand, none to trace gravel.		5	S	0.0 0.1	5 / 5	20.0-25.0 ft-bgs: Stiff, gray, SILT and CLAY, some gravel, some sand, dry (CL).		

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)



USCS Silt (ML)



USCS Silty Sand (SM)

DRILLING COMPANY: Boart Longyear
DRILLER: J. Drabek
GOLDER INSPECTOR: DWM

LOGGED BY: MRH
LOGGED BY DATE: 3/12/2013
CHECKED BY:
CHECKED BY DATE:







BOREHOLE LOG: MW-56D

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 39
DEPTH OF SOIL DRILL: 39
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473198.6 E: 4685938.54
GROUND SURFACE ELEV.: 1047.76
DATUM: N/A
START DATE/TIME: 2/27/2013 12:20:00 PM
END DATE/TIME: 2/27/2013 1:40:00 PM

DRILLING METHOD: Sonic
CORING METHOD: N/A
DRILL RIG: CDD 1415

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1020.0	Stiff, gray, SILT and CLAY, some sand, none to trace gravel.		6	S	0.0	4 / 4	25.0-29.0 ft-bgs: Stiff, gray, SILT and CLAY, some sand, trace gravel, moist (CL).		29.0-31.0 ft-bgs: Granular bentonite 31.0-39.0 ft-bgs: #2 sand filter pack	
1015.0	Dense, SILT, SAND and GRAVEL, wet.		7	S	0.9	6 / 6	29.0-31.0 ft-bgs: Stiff, gray, SILT and CLAY, some sand, trace gravel, moist (CL). 31.0-33.0 ft-bgs: Stiff, yellow-brown, SILT and CLAY, some sand, trace gravel, moist (CL). 33.0-34.0 ft-bgs: Loose, brown, SILT, wet (ML). 34.0-35.0 ft-bgs: Very dense, brown, SILT and GRAVEL, moist (ML).			
1010.0	Stiff, gray, SILT and CLAY, some sand, none to trace gravel.		8	S	0.5	4 / 4	35.0-37.0 ft-bgs: Loose, yellow-brown, silty SAND, some gravel, wet (SM). 37.0-39.0 ft-bgs: Stiff, yellow-brown, SILT and CLAY, trace clay, moist, friable (CL).		33.0-38.0 ft-bgs: 2-inch PVC well screen (0.010-inch slotted).	
1005.0										
1000.0										

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)



USCS Silty (ML)



USCS Silty Sand (SM)

DRILLING COMPANY: Boart Longyear
DRILLER: J. Drabek
GOLDER INSPECTOR: DWM

LOGGED BY: MRH
LOGGED BY DATE: 3/12/2013
CHECKED BY:
CHECKED BY DATE:



BOREHOLE LOG: MW-56S

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 15
DEPTH OF SOIL DRILL: 20
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473203.94 E: 4685937.19
GROUND SURFACE ELEV.: 1047.82
DATUM: N/A
START DATE/TIME: 2/27/2013 1:40:00 PM
END DATE/TIME: 2/27/2013 2:30:00 PM

DRILLING METHOD: Sonic
CORING METHOD: N/A
DRILL RIG: CDD 1415

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0							No samples collected. Refer to MW-56D for soil stratigraphy.		Steel casing to 2.6 ft above ground. Bollards placed around well for protection. 4-inch diameter boring 0.0-1.0 ft-bgs: Cement 1.0-4.0 ft-bgs: Granular bentonite 4.0-15.0 ft-bgs: #2 Sand filter 5.0-15.0 ft-bgs: 2-inch PVC well screen (0.010-inch slotted)
1040.0									
1035.0									
1030.0									
1025.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Boart Longyear
DRILLER: J. Drabek
GOLDER INSPECTOR: DWM

LOGGED BY: MRH
LOGGED BY DATE: 3/12/2013
CHECKED BY:
CHECKED BY DATE:



BOREHOLE LOG: MW-57

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 38
DEPTH OF SOIL DRILL: 38
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473169.91 E: 4685827.39
GROUND SURFACE ELEV.: 1048.59
DATUM: N/A
START DATE/TIME: 2/27/2013 10:00:00 AM
END DATE/TIME: 3/1/2013 9:45:00 AM

DRILLING METHOD: Sonic
CORING METHOD: N/A
DRILL RIG: CDD 1415

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0	Stiff, gray with red-brown streaks, SILT and CLAY, some sand, trace gravel, dry to moist		1	S	0.3	5 / 5	0.0-5.0 ft-bgs: Stiff, brown with red-gray streaks, SILT and CLAY, some sand trace gravel, dry, friable (CL).		10-inch road box at surface Installed 6-inch diameter steel casing in a 10-inch diameter borehole to 29.0 ft-bgs - grouted to surface and let set for >24 hours. Advanced 4-inch diameter boring through the steel casing and set a 2-inch PVC well to 37 ft-bgs. 0.0-29.0 ft-bgs: Cement grout
					5.2				
1040.0			2	S	0.7	5 / 5	5.0-10.0 ft-bgs: Stiff, brown to gray, SILT and CLAY, some sand, trace gravel, wet, friable (CL).		
					7.5				
1035.0			3	S	3.9	5 / 5	10.0-15.0 ft-bgs: Stiff, gray with red-brown streaks, SILT and CLAY, some sand, trace gravel, dry, friable (CL).		
					3.9				
1030.0	Stiff, gray, SILT and CLAY, some sand, trace gravel, moist		4	S	0.4	5 / 5	15.0-20.0 ft-bgs: Stiff, gray, SILT and CLAY, some sand, trace gravel, fry, friable (CL).		
					0.3				
1025.0			5	S	2.4	5 / 5	20.0-25.0 ft-bgs: Stiff, gray, SILT and CLAY, some sand, trace gravel, moist, friable (CL).		
					.3				

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Silty Clay (CL-ML)

DRILLING COMPANY: Boart Longyear
DRILLER: J. Drabek
GOLDER INSPECTOR: DWM

LOGGED BY: MRH
LOGGED BY DATE: 3/12/2013
CHECKED BY:
CHECKED BY DATE:









BOREHOLE LOG: MW-57

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 38
DEPTH OF SOIL DRILL: 38
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473169.91 E: 4685827.39
GROUND SURFACE ELEV.: 1048.59
DATUM: N/A
START DATE/TIME: 2/27/2013 10:00:00 AM
END DATE/TIME: 3/1/2013 9:45:00 AM

DRILLING METHOD: Sonic
CORING METHOD: N/A
DRILL RIG: CDD 1415

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %				
1020.0	Stiff, gray, SILT and CLAY, some sand, trace gravel, moist		5	S	0.2	4 / 4	25.0-29.0 ft-bgs: Stiff, gray, SILT and CLAY, some sand, trace gravel, moist, friable (CL).		0.0-29.0 ft-bgs: Cement grout	
1015.0	Stiff, yellow-brown SILT and CLAY, some gravel, some sand, moist		6	S	1.6 6.8	6 / 6	29.0-31.0 ft-bgs: Stiff, yellow-brown SILT and CLAY, some gravel, some sand, moist, friable (CL). 31.0-32.5 ft-bgs: Loose, yellow-brown SILT, wet (ML). 32.5-34.5 ft-bgs: Stiff, yellow-brown SILT and CLAY, some sand, trace gravel, dry (CL) 34.5-35.0 ft-bgs: Very dense, brown-gray SILT, some sand, trace gravel (ML).		29.0-30.5 ft-bgs: Granular bentonite 30.5-38.0 ft-bgs: #2 sand pack. 32.0-37.0 ft-bgs: 2-inch PVC well screen (0.010-inch slotted).	
1010.0	Very stiff, brown-yellow SILT and CLAY, some sand, some gravel		7	S	1.9	3 / 3	35.0-38.0 ft-bgs: Very stiff, brown-yellow SILT and CLAY, some sand, some gravel, moist (CL).			
1005.0										
1000.0										

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)



USCS Low Plasticity Silty Clay (CL-ML)

DRILLING COMPANY: Boart Longyear
DRILLER: J. Drabek
GOLDER INSPECTOR: DWM

LOGGED BY: MRH
LOGGED BY DATE: 3/12/2013
CHECKED BY:
CHECKED BY DATE:



BOREHOLE LOG: MW-58

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 40
DEPTH OF SOIL DRILL: 40
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473158.37 E: 4685672.68
GROUND SURFACE ELEV.: 1049.04
DATUM: N/A
START DATE/TIME: 2/26/2013 3:45:00 PM
END DATE/TIME: 2/28/2013 11:00:00 AM

DRILLING METHOD: Sonic
CORING METHOD: N/A
DRILL RIG: CDD 1415

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1045.0	Dense, brown, SILT and GRAVEL, some sand		1	S	0.4	1 / 5		0.0-1.0 ft: Dense, brown, SILT and GRAVEL, some sand, low recovery due to plugged drill casing.		10-inch road box at surface. Installed 6-inch diameter steel casing in a 10-inch diameter borehole to 29.0 ft-bgs - grouted to surface and let set for >24 hours. Advanced 4-inch diameter boring through the steel casing and set a 2-inch PVC well to 39 ft-bgs. 0.0-29.0 ft-bgs: Cement grout, 4-inch diameter boring.
1040.0			2	S	0.9 0.2	5 / 5		5.0-10.0 ft-bgs: Dense, brown, SILT, some sand moist (ML).		
1035.0	Stiff, red-brown to brown, CLAY, some gravel, some sand, moist		3	S	0.2 0.1	5 / 5		10.0-15.0 ft-bgs: Stiff, red-brown, CLAY, some gravel, some sand, moist (CL).		
1030.0			4	S	0.3 0.3	5 / 5		15.0-20.0 ft-bgs: Stiff, brown, SILT and CLAY, some sand, moist, friable (CL).		
1025.0	Stiff, gray, SILT and CLAY, some sand, trace gravel, dry		5	S	0.2 0.1	5 / 5		20.0-25.0 ft-bgs: Stiff, gray, SILT and CLAY, some sand, trace gravel, dry, friable (CL).		

LITHOLOGY LEGEND



USCS Silt (ML)



USCS Low Plasticity Clay (CL)

DRILLING COMPANY: Boart Longyear
DRILLER: J. Drabek
GOLDER INSPECTOR: DWM

LOGGED BY: MRH
LOGGED BY DATE: 3/12/2013
CHECKED BY:
CHECKED BY DATE:



BOREHOLE LOG: MW-58

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 40
DEPTH OF SOIL DRILL: 20
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473158.37 E: 4685672.68
GROUND SURFACE ELEV.: 1049.04
DATUM: N/A
START DATE/TIME: 2/26/2013 3:45:00 PM
END DATE/TIME: 2/28/2013 11:00:00 AM

DRILLING METHOD: Sonic
CORING METHOD: N/A
DRILL RIG: CDD 1415

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1020.0	Stiff, gray, SILT and CLAY, some sand, trace gravel, dry		6	S	0.5	5 / 5	25.0-30.0 ft-bgs: Stiff, gray, CLAY and SILT, some gravel, some sand, dry, friable (CL).		0.0-29.0 ft-bgs: Cement grout, 4-inch diameter boring.	
	Stiff, dark yellow, SILT and CLAY, some gravel, some sand, dry		7	S	4.1	5 / 5	30.0-35.0 ft-bgs: Stiff, dark yellow, SILT and CLAY, some gravel, some sand, dry, friable (CL).		29.0-32.0 ft-bgs: Granular bentonite.	
1015.0			8	S	0.2 0.3	5 / 5	35.0-40.0 ft-bgs: Stiff, dark yellow, SILT and CLAY, some gravel, some sand, dry, friable (CL).		32.0-40.0 ft-bgs: #2 sand filter.	
1010.0							34.0-39.0 ft-bgs: 2-inch PVC well screen (0.010-inch slotted).			
1005.0										
1000.0										

LITHOLOGY LEGEND



USCS Silt (ML)



USCS Low Plasticity Clay (CL)

DRILLING COMPANY: Boart Longyear
DRILLER: J. Drabek
GOLDER INSPECTOR: DWM

LOGGED BY: MRH
LOGGED BY DATE: 3/12/2013
CHECKED BY:
CHECKED BY DATE:




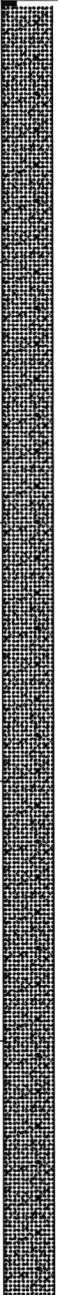
BOREHOLE LOG: MW-59

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 41
DEPTH OF SOIL DRILL: 41
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473157.08 E: 4685536.73
GROUND SURFACE ELEV.: 1050.19
DATUM: N/A
START DATE/TIME: 2/27/2013 10:00:00 AM
END DATE/TIME: 3/1/2013 9:45:00 AM

DRILLING METHOD: Sonic
CORING METHOD: N/A
DRILL RIG: CDD 1415

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1050.0	Stiff, red-brown, SILT and CLAY, some sand, trace gravel, dry		1	S	7.2 8.5	5 / 5	0.0-2.0 ft-bgs: Stiff, brown, SILT and CLAY, some sand dry, friable (CL). 2.0-5.0 ft-bgs: Stiff, brown, CLAY, some sand, pliable (CL).		10-inch road box at surface. Installed 6-inch diameter steel casing in a 10-inch diameter borehole to 31.0 ft-bgs - grouted to surface and let set for >24 hours. Advanced 4-inch diameter boring through the steel casing and set a 2-inch PVC well to 40 ft-bgs. 0.0-31.0 ft-bgs: Cement grout
1045.0			2	S	4.5 0.2	5 / 5	5.0-10.0 ft-bgs: Stiff, red-brown, SILT and CLAY, some sand, trace gravel, dry (CL).		
1040.0			3	S	0.2 0.2	5 / 5	10.0-15.0 ft-bgs: Stiff, red-brown, SILT and CLAY, some sand, trace gravel, dry (CL).		
1035.0			4	S	0.2 0.1	5 / 5	15.0-20.0 ft-bgs: Stiff, brown to gray, SILT and CLAY, some sand, trace gravel, dry (CL).		
1030.0	Stiff, gray, SILT and CLAY, some sand, some gravel, dry (CL).		5	S	0.1 0.1	5 / 5	20.0-25.0 ft-bgs: Stiff, gray, SILT and CLAY, some sand, some gravel, dry (CL).		

LITHOLOGY LEGEND



USCS Low Plasticity Clay
(CL)



USCS Silt (ML)

DRILLING COMPANY: Boart Longyear
DRILLER: J. Drabek
GOLDER INSPECTOR: DWM

LOGGED BY: MRH
LOGGED BY DATE: 3/12/2013
CHECKED BY:
CHECKED BY DATE:



BOREHOLE LOG: MW-59

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 41
DEPTH OF SOIL DRILL: 41
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473157.08 E: 4685536.73
GROUND SURFACE ELEV.: 1050.19
DATUM: N/A
START DATE/TIME: 2/27/2013 10:00:00 AM
END DATE/TIME: 3/1/2013 9:45:00 AM

DRILLING METHOD: Sonic
CORING METHOD: N/A
DRILL RIG: CDD 1415

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %				
1025.0	Stiff, gray, SILT and CLAY, some sand, some gravel, dry (CL).		5	S	0.1	4 / 4	25.0-29.0 ft-bgs: Stiff, gray, SILT and CLAY, some sand, some gravel, dry (CL).		0.0-31.0 ft-bgs: Cement grout	
1020.0			6	S	1.7	5 / 5	29.0-31.0 ft-bgs: Stiff, gray, SILT and CLAY, some gravel, some sand, moist (CL). 31.0-33.0 ft-bgs: Stiff, red-brown, SILT and CLAY, some sand, trace gravel (CL). 33.0-36.0 ft-bgs: Dense, yellow-brown, SILT, some gravel, some sand (ML).		31.0-33.0 ft-bgs: Granular bentonite	
1015.0	Dense, yellow-brown, SILT, some gravel, some sand				0.3				33.0-41.0 ft-bgs: #2 sand filter pack	
			7	S	1.9	3 / 3	36.0-39.0 ft-bgs: Loose, yellow-brown, SILT, some sand, wet (ML).		35.0-40.0 ft-bgs: 2-inch PVC well screen (0.010-inch slotted).	
1010.0	Stiff, yellow-brown, SILT and CLAY, some gravel, some sand, dry		8	S	0.2	2 / 2	39.0-41.0 ft-bgs: Stiff, yellow-brown, SILT and CLAY, some gravel, some sand, dry (CL).			
1005.0										

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)



USCS Silt (ML)

DRILLING COMPANY: Boart Longyear
DRILLER: J. Drabek
GOLDER INSPECTOR: DWM

LOGGED BY: MRH
LOGGED BY DATE: 3/12/2013
CHECKED BY:
CHECKED BY DATE:













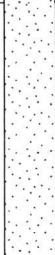

BOREHOLE LOG: MW-60

PAGE 1 of 1

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 20
DEPTH OF SOIL DRILL: 20
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473101.18 E: 4685520
GROUND SURFACE ELEV.: 1052.84
DATUM: N/A
START DATE/TIME: 2/27/2013 2:40:00 PM
END DATE/TIME: 2/27/2013 3:05:00 PM

DRILLING METHOD: Sonic
CORING METHOD: N/A
DRILL RIG: CDD 1415

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1050.0	Stiff, dark gray, SILT and CLAY, some sand, moist		1	S	0.2	5 / 5	0.0-4.0 ft-bgs: Stiff, dark gray, SILT and CLAY, some sand, moist, friable, moist (CL). 4.0-5.0 ft-bgs: Dense, brown to light tan, SILT, some sand, dry (ML).		2.6 ft above ground casing pickup at surface. Bollards placed around well for protection. 4-inch diameter hole 0.0-2.0 ft-bgs: Cement 4-inch steel casing to 2.6 ft above ground surface 0.0-13.0 ft-bgs: Granular bentonite	
	Dense, brown to light tan, SILT, some sand, dry				0.2					
1045.0	Stiff, brown with gray streaks, SILT and CLAY, some sand, trace gravel		2	S	0.2	5 / 5	5.0-10.0 ft-bgs: Stiff, brown with gray streaks, SILT and CLAY, some sand, trace gravel, friable, wet (CL).			
					0.2					
1040.0			3	S	0.2	5 / 5	10.0-15.0 ft-bgs: Stiff, brown with red streaks, SILT and CLAY, some sand, moist, no odor (CL), pliable.		13.0-20.0 ft-bgs: #2 Sand filter	
					0.1					
1035.0	15.0-20.0 ft-bgs: Stiff, gray, SILT and CLAY, some sand, trace gravel, moist		4	S	0.1	5 / 5	15.0-20.0 ft-bgs: Stiff, gray, SILT and CLAY, some sand, trace gravel, moist, friable (CL).		15.0-20.0 ft-bgs: 2-inch PVC well screen (0.010-inch slotted).	
					0.1					
1030.0										

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)



USCS Silt (ML)

DRILLING COMPANY: Boart Longyear
DRILLER: J. Drabek
GOLDER INSPECTOR: DWM

LOGGED BY: MRH
LOGGED BY DATE: 3/12/2013
CHECKED BY:
CHECKED BY DATE:



BOREHOLE LOG: MW-61

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 40
DEPTH OF SOIL DRILL: 40
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473628.29 E: 4685657.98
GROUND SURFACE ELEV.: 1049.84
DATUM: N/A
START DATE/TIME: 2/26/2013 1:50:00 PM
END DATE/TIME: 2/28/2013 9:30:00 AM

DRILLING METHOD: Sonic
CORING METHOD: N/A
DRILL RIG: CDD 1415

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0							No samples collected.		10-inch steel flush mount at surface. Installed 6-inch diameter steel casing in a 10-inch diameter borehole to 30.0 ft-bgs - grouted to surface and let set for >24 hours. Advanced 4-inch diameter boring through the steel casing and set a 2-inch PVC well to 39 ft-bgs. 0.0-30.0 ft-bgs cement grout.
1040.0									
1035.0									
1030.0									
1025.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Boart Longyear
DRILLER: J. Drabek
GOLDER INSPECTOR: DWM

LOGGED BY: MRH
LOGGED BY DATE: 3/12/2013
CHECKED BY:
CHECKED BY DATE:



BOREHOLE LOG: MW-61

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 40
DEPTH OF SOIL DRILL: 40
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473628.29 E: 4685657.98
GROUND SURFACE ELEV.: 1049.84
DATUM: N/A
START DATE/TIME: 2/26/2013 1:50:00 PM
END DATE/TIME: 2/28/2013 9:30:00 AM

DRILLING METHOD: Sonic
CORING METHOD: N/A
DRILL RIG: CDD 1415

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1020.0							No samples collected.		0.0-30.0 ft-bgs cement grout.
									30.0-32.0 ft-bgs: Granular bentonite, 4-inch diameter hole
									32.0-40.0 ft-bgs: #2 sand filter
1015.0									34.0-39.0 ft-bgs: 2-inch PVC well screen (0.010-inch slotted)
1010.0									
1005.0									
1000.0									

LITHOLOGY LEGEND

DRILLING COMPANY: Boart Longyear
DRILLER: J. Drabek
GOLDER INSPECTOR: DWM

LOGGED BY: MRH
LOGGED BY DATE: 3/12/2013
CHECKED BY:
CHECKED BY DATE:





BOREHOLE LOG: MW-62

PAGE 1 of 3

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 73
DEPTH OF SOIL DRILL: 73
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473166.18 E: 4685646.18
GROUND SURFACE ELEV.: 1049.15
DATUM: N/A
START DATE/TIME: 9/16/2013 9:15:00 AM
END DATE/TIME: 9/17/2013 5:40:00 PM

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: GP24-300RS

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1045.0	SILTY CLAY and fine to coarse SAND, trace fine subangular to subrounded gravel, olive yellow, wet, soft to stiff.		1	Sonic	0	6 / 6	0.0-0.5 ft.: Concrete 0.5-6.0 ft.: (CL), SILTY CLAY and fine to coarse SAND, trace fine subangular gravel, olive yellow, wet, soft to firm. Collected ATL sample 3.5-4.0 ft		8-inch steel flush mount casing. 0.5-1.0 ft.: Cement 0.0-29.0 ft-bgs: Cement grout, 10-inch diameter borehole to 29 ft. Installed 6-inch diameter steel casing in a 10-inch diameter borehole to 29 ft bgs - grouted to surface and let set for >24 hours. Advanced 4-inch diameter boring through the steel casing and set a 2-inch PVC well to 72 ft-bgs.	
1040.0			2	Sonic	0	8 / 8	6.0-12.9 ft.: (CL), SILTY CLAY and fine to coarse SAND, trace fine sub-angular gravel, olive yellow, wet, soft to firm. 12.9-14.0 ft.: (CL), SILTY CLAY and fine to coarse SAND, trace fine subangular to subrounded gravel, dark gray, wet, firm to stiff.			
1035.0	SILTY CLAY and fine to coarse SAND, trace fine subangular to subrounded gravel, dark gray, wet, firm to stiff.		3	Sonic	0	10 / 10	14.0-24.0 ft.: (CL), SILTY CLAY and fine to coarse SAND, trace fine subangular to subrounded gravel, dark gray, wet, firm to stiff. Collected ATL sample 20.4-21.0 ft			
1030.0										
1025.0										

LITHOLOGY LEGEND



USCS Low Plasticity Clay
(CL)
USCS Silty Sand (SM)



USCS Silt (ML)
USCS Low Plasticity Silty
Clay (CL-ML)



USCS Clayey Sand
(SC-SM)

DRILLING COMPANY: Cascade Drilling
DRILLER: B. Beuning
GOLDER INSPECTOR: JSP

LOGGED BY: CJS
LOGGED BY DATE: 10/24/2013
CHECKED BY: JSP
CHECKED BY DATE: 10/30/2013



ELLECTROLUX JEFFERSON JEFFERSON LOGS GPJ GOLDER NH 2011.GDT 12/2/13

BOREHOLE LOG: MW-62

PAGE 2 of 3

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 73
DEPTH OF SOIL DRILL: 73
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473166.18 E: 4685646.18
GROUND SURFACE ELEV.: 1049.15
DATUM: N/A
START DATE/TIME: 9/16/2013 9:15:00 AM
END DATE/TIME: 9/17/2013 5:40:00 PM

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: GP24-300RS

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %				
	SILTY CLAY and fine to coarse SAND , trace fine subangular to subrounded gravel, dark gray, wet, firm to stiff.		4	Sonic	0	5 / 5		24.0-25.4 ft.: (CL and SP), SILTY CLAY and fine to coarse SAND, trace fine subangular to subrounded gravel, dark gray, wet, firm to stiff. 25.4-29.0 ft.: (CL), SILTY CLAY and fine to coarse SAND, trace subangular to subrounded fine gravel, dark gray, clay content decreasing from previous samples, wet, stiff.		Installed 6" diameter steel casing to 29 ft bgs in 10" diameter borehole. Used 90 gallons of grout to set casing.
1020.0	SILT, trace fine sand, gray, wet, soft.							29.0-30.7 ft.: (ML), SILT, trace fine sand, gray, wet, soft. 30.7-31.4 ft.: (ML), SILT, some angular to subangular gravel, brownish yellow, wet, very stiff. 31.4-37.0 ft.: (SC-SM), fine to coarse SAND and SILTY CLAY to CLAYEY SILT, trace fine to coarse subangular to subrounded gravel, brownish yellow, some gray vertical to horizontal silt seams, wet, firm to very firm.		
	Fine to coarse SAND and SILTY CLAY to CLAYEY SILT, trace fine to coarse subangular to subrounded gravel, brownish yellow, wet, firm to very stiff.		5	Sonic	0	8 / 8		Collected ATL sample 31.0-32.0 ft		
1015.0										
	Fine SAND and SILT , trace fine to coarse subangular gravel, brownish yellow, wet, soft to firm.							37.0-39.1 ft.: (SM), fine SAND and SILT, trace fine to coarse subangular gravel, brownish yellow, wet, soft to firm. 39.1-43.0 ft.: (ML), CLAYEY SILT, some fine to coarse sand, trace fine subangular to subrounded gravel, brown, reddish brown mottling from 43.1-43.4 ft, moist, stiff to very stiff.		
1010.0	SILTY CLAY to CLAYEY SILT, trace angular to subangular fine to coarse fine gravel, yellow-brown, stiff to hard.		6	Sonic	0	6 / 6		Collected ATL sample 37.0-38.0 ft		
	SILTY CLAY to CLAYEY SILT, trace angular to subangular fine to coarse fine gravel, yellow-brown, stiff to hard.							43.0-43.4 ft.: (ML), CLAYEY SILT, some fine to coarse sand, trace fine subangular to subrounded gravel, brown, moist, stiff to very stiff. 43.4-49.0 ft.: (CL-ML), SILTY CLAY to CLAYEY SILT, trace angular to subangular fine to coarse fine gravel, yellow-brown, stiff to hard.		
1005.0			7	Sonic	0	6 / 6		Collected ATL sample 43.5-44.5 ft		
1000.0										

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)

USCS Silty Sand (SM)



USCS Silt (ML)

USCS Low Plasticity Silty Clay (CL-ML)



USCS Clayey Sand (SC-SM)

DRILLING COMPANY: Cascade Drilling
DRILLER: B. Beuning
GOLDER INSPECTOR: JSP

LOGGED BY: CJS
LOGGED BY DATE: 10/24/2013
CHECKED BY: JSP
CHECKED BY DATE: 10/30/2013



BOREHOLE LOG: MW-62

PAGE 3 of 3

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 73
DEPTH OF SOIL DRILL: 73
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473166.18 E: 4685646.18
GROUND SURFACE ELEV.: 1049.15
DATUM: N/A
START DATE/TIME: 9/16/2013 9:15:00 AM
END DATE/TIME: 9/17/2013 5:40:00 PM

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: GP24-300RS

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
995.0	<u>Fine SANDY SILT</u> , yellow-brown, wet, firm. Fine to coarse sandy SILTY CLAY, trace fine gravel, brownish-gray to dark gray, moist wet, firm to very stiff.		8	Sonic	0	10.5 / 10	49.0-49.8 ft.: (CL-ML), SILTY CLAY to CLAYEY SILT, trace angular to subangular fine to coarse fine gravel, yellow-brown, stiff to hard. 49.8-50.0 ft.: (ML), fine SANDY SILT, yellow-brown, wet, firm. 50.0-55.2 ft.: (CL-ML), fine to coarse sandy CLAYEY SILT, some cobbles, some subangular to subrounded fine to coarse gravel, brown, moist, very stiff. 55.2-55.4 ft.: (CH-CL), SILTY CLAY, gray, moist, firm to stiff. 55.4-56.0 ft.: (MH), CLAYEY SILT, some fine to coarse sand, black, wet, stiff. 56.0-59.0 ft.: (CL), fine to coarse sandy SILTY CLAY, brownish-gray to dark gray, moist, stiff to very stiff. Collected ATL sample 55.4-56.0 ft		90 gallons of grout, 95% Portland Type I/II Cement and 5% Quick-gel Bentonite Powder (5 bags, 94#/bag) with 30 gallons of water.
990.0							59.0-69.0 ft.: (CL), fine to coarse sandy SILTY CLAY, brownish-gray to dark gray, moist, stiff to very stiff. Collected ATL sample 59.0-60.0 ft		62.0-64.5 ft.: 1/2 bag of bentonite chips.
985.0			9	Sonic	0	11 / 10			64.5-73.0 ft.: 4 bags of #40 Red Flint Sand (50#/bag)
980.0			10	Sonic	0	4 / 4	69.0-71.0 ft.: (CL), fine to coarse sandy SILTY CLAY, trace angular to subangular fine gravel, gray, moist, very stiff. 71.0-73.0 ft.: (CL-ML), SILTY Clay to CLAYEY SILT, some fine to coarse sand, gray, wet, firm to stiff. Collected ATL sample 69.0-70.0 ft		67.0-72.0 ft.: 2" diameter, 0.01" slotted PVC pipe.
975.0									

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)
USCS Silty Sand (SM)



USCS Silt (ML)
USCS Low Plasticity Silty Clay (CL-ML)



USCS Clayey Sand (SC-SM)

DRILLING COMPANY: Cascade Drilling
DRILLER: B. Beuning

GOLDER INSPECTOR: JSP

LOGGED BY: CJS
LOGGED BY DATE: 10/24/2013
CHECKED BY: JSP
CHECKED BY DATE: 10/30/2013



ELLECTROLUX JEFFERSON JEFFERSON LOGS.GPJ GOLDER NH 2011.GDT 12/2/13

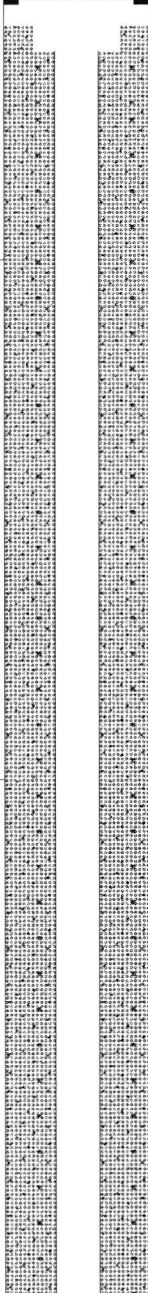
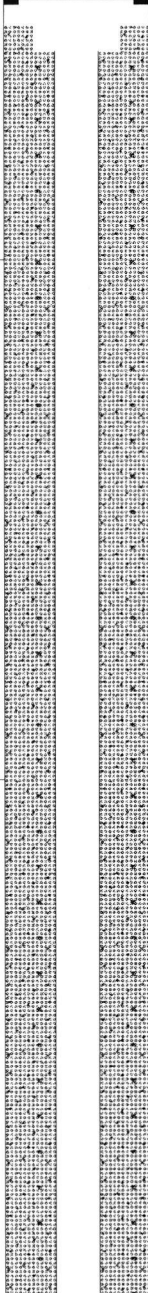
BOREHOLE LOG: MW-63

PAGE 1 of 3

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 73
DEPTH OF SOIL DRILL: 73
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473322.68 E: 4685890.42
GROUND SURFACE ELEV.: 1049.14
DATUM: N/A
START DATE/TIME: 9/16/2013 1:54:00 PM
END DATE/TIME: 9/18/2013 1:40:00 PM

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: GP24-300RS

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1045.0	Sandy SILT, brown to black, dry, soft.		1	Sonic		5 / 5	0.0-2.3 ft.: (ML), sandy SILT, brown to black, dry, soft.		8-inch steel flush mount casing. 0.5-1.0 ft.: Cement 0.0-29.0 ft-bgs: Cement grout, 10-inch diameter borehole to 29 ft. Installed 6-inch diameter steel casing in a 10-inch diameter borehole to 29 ft bgs - grouted to surface and let set for >24 hours. Advanced 4-inch diameter boring through the steel casing and set a 2-inch PVC well to 72 ft-bgs.
	SILTY CLAY, light gray to olive gray to dark gray, moist to wet, soft.				13.8		2.3-4.3 ft.: (CL), SILTY CLAY, some fine to coarse sand, dark gray, moist, firm to hard. 4.3-5.0 ft.: (CH-CL), SILTY CLAY, light gray with some brown staining, stronger odor than detected by PID, soft.		
1040.0	SILTY CLAY and fine to coarse SAND, trace fine subangular gravel, gray to brown, wet, stiff.		2	Sonic		10 / 10	5.0-6.7 ft.: (CH-CL), SILTY CLAY, light gray with some brown staining, stronger odor than detected by PID, soft.		
	Fine to medium SAND, some silt, trace subangular gravel, brown, wet, compact.				0		6.7-8.2 ft.: (CL), SILTY CLAY, olive gray, wet, soft. 8.2-8.55 ft.: (CL), SILTY CLAY, trace fine subangular gravel, olive gray, brown staining with odor, wet, soft. 8.55-8.6 ft.: (CL), SILTY SAND, brown, wet, loose. 8.6-9.9 ft.: (CL), SILTY CLAY and fine to coarse SAND, trace fine subangular gravel, gray to brown, odor, wet, stiff. 9.9-10.0 ft.: (SP-SM), fine to medium SAND, some silt, trace subangular gravel, brown, odor, wet, compact.		
1035.0	SILTY CLAY and fine to coarse SAND, some rounded cobbles, trace to some subrounded to rounded gravel, gray, wet, stiff.		3	Sonic		10 / 10	0		
					0		10.0-10.2 ft.: (SP-SM), fine to medium SAND, some silt, trace subangular gravel, brown, odor, wet, compact. 10.2-11.0 ft.: (SP-SM), fine to medium SAND, some silt, brown, odor, wet, compact. 11.0-25.0 ft.: (CL), SILTY CLAY and fine to coarse SAND, some rounded cobbles 1" in diameter and 2.5" long, trace to some subrounded to rounded gravel, gray, wet, stiff.		
1030.0			3	Sonic		10 / 10	0		
					0		Collected ATL sample 14.0-14.5 ft		
1025.0									

LITHOLOGY LEGEND



USCS Silt (ML)
USCS Poorly-graded Sand with Silt (SP-SM)



USCS Low to High Plasticity Clay (CL-CH)
USCS Clayey Sand (SC-SM)



USCS Low Plasticity Clay (CL)
USCS Silty Gravel

DRILLING COMPANY: Cascade Drilling
DRILLER: B. Beuning
GOLDER INSPECTOR: JSP

LOGGED BY: CJS
LOGGED BY DATE: 10/24/2013
CHECKED BY: JSP
CHECKED BY DATE: 10/30/2013



BOREHOLE LOG: MW-63

PAGE 2 of 3

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 73
DEPTH OF SOIL DRILL: 73
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473322.68 E: 4685890.42
GROUND SURFACE ELEV.: 1049.14
DATUM: N/A
START DATE/TIME: 9/16/2013 1:54:00 PM
END DATE/TIME: 9/18/2013 1:40:00 PM

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: GP24-300RS

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
	SILTY CLAY and fine to coarse SAND, some rounded cobbles, trace to some subrounded to rounded gravel, gray, wet, stiff.		4	Sonic	0	4 / 4		25.0-29.0 ft.: (CL), SILTY CLAY and fine to coarse SAND, some rounded cobbles 1" in diameter and 2.5" long, trace to some subrounded to rounded gravel, gray, wet, stiff.		0-29.0 ft.: Installed 6-inch diameter steel casing to 29 ft bgs. 75 gallons of grout, 95% Portland Type I/II Cement and 5% Quick-gel Bentonite Powder (7 bags, 94#/bag) with 30 gallons of water.
1020.0	Fine to coarse SAND and SILTY CLAY to CLAYEY SILT, trace fine to coarse subangular gravel, yellowish brown, wet, very dense.		5	Sonic	0	6 / 6		29.0-29.6 ft.: (CL), SILTY CLAY and fine to coarse SAND, trace to some fine subrounded to rounded gravel, gray, wet, stiff. 29.6-31.0 ft.: (SC-SM), fine to coarse SAND and SILTY CLAY to CLAYEY SILT, trace fine to coarse subangular gravel, yellowish brown, 1/2 inch fine to coarse silty sand seam at 30.5 ft bgs, very dense. Collected ATL sample 30.0-31.0 ft		
1015.0	SILTY GRAVEL, some fine to coarse sand, wet, loose. SILTY SAND, poorly graded, trace fine subangular gravel, yellowish brown, wet, loose.							31.0-31.7 ft.: (SP-SM), medium SILTY SAND, poorly graded, yellowish brown, wet, loose to compact. 31.7-35.0 ft.: (SC-SM), fine to coarse SAND and SILTY CLAY to CLAYEY SILT, some fine subangular to subrounded gravel, yellowish brown, wet, very dense. Collected ATL sample 34.0-35.0 ft		
1010.0	SILTY GRAVEL, rounded to subrounded, some fine to coarse sand, brown, wet, loose to compact.							35.0-35.5 ft.: (GM), SILTY GRAVEL, some fine to coarse sand, wet, loose. 35.5-38.0 ft.: (SP-SM), fine SILTY SAND, poorly graded, trace fine subangular gravel, yellowish brown, wet, loose. 38.0-39.7 ft.: (GM) SILTY GRAVEL, rounded to subrounded, some fine to coarse sand, brown, wet, loose to compact. 39.7-39.8 ft.: (SP-SM), fine SILTY SAND, poorly graded, brown, wet, loose. 39.8-42.0 ft.: (MH/CL), CLAYEY SILT to SILT CLAY, some subangular to subrounded gravel, brown, moist, stiff to very stiff. 42.0-42.3 ft.: (MH/CL), CLAYEY SILT, trace subrounded gravel, yellowish brown with light gray mottling, soft to firm. 43.2-46.4 ft.: (CL), SILTY CLAY, fine to coarse, trace subangular to subrounded gravel, yellowish brown, moist, very stiff. Collected ATL sample 43.5-44.5 ft		
1005.0	SILTY CLAY to CLAYEY SILT, some fine sand, trace subrounded gravel, dark brown to brown to gray, dry to wet, stiff to very stiff.		6	Sonic	0	20 / 20		46.4-47.5 ft.: (MH and CL), CLAYEY SILT, trace fine subangular to subrounded gravel, dark brown, varved gray and black clay stringers, stiff to very stiff.		
1000.0										

LITHOLOGY LEGEND



USCS Silt (ML)
USCS Poorly-graded Sand with Silt (SP-SM)



USCS Low to High Plasticity Clay (CL-CH)
USCS Clayey Sand (SC-SM)



USCS Low Plasticity Clay (CL)
USCS Silty Gravel

DRILLING COMPANY: Cascade Drilling
DRILLER: B. Beuning
GOLDER INSPECTOR: JSP

LOGGED BY: CJS
LOGGED BY DATE: 10/24/2013
CHECKED BY: JSP
CHECKED BY DATE: 10/30/2013



ELLECTROLUX JEFFERSON JEFFERSON LOGS GPJ GOLDER NH 2011.GDT 12/2/13

BOREHOLE LOG: MW-63

PAGE 3 of 3

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 73
DEPTH OF SOIL DRILL: 73
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473322.68 E: 4685890.42
GROUND SURFACE ELEV.: 1049.14
DATUM: N/A
START DATE/TIME: 9/16/2013 1:54:00 PM
END DATE/TIME: 9/18/2013 1:40:00 PM

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: GP24-300RS

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information	
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %					
995.0	<p>Fine SAND to SILTY SAND, poorly graded, brownish yellow, two gray clay seams approximately 1/8" thick, wet, loose.</p> <p>CLAYEY SILT, trace subangular to subrounded gravel, yellowish brown to gray, wet, very stiff.</p> <p>Fine SILTY SAND, poorly graded, brown, wet, loose.</p>		6	Sonic	0	20 / 20	47.5-50.0 ft.: (CL), SILTY CLAY, some fine to coarse sand, dark brown, moist, stiff to very stiff. Collected ATL sample 47.9-48.5 ft 50.0-50.9 ft.: (SP-SM), fine SAND to SILTY SAND, poorly graded, brownish yellow, two gray clay seams approximately 1/8" thick, wet, loose. 50.9-52.7 ft.: (CL/MH), CLAYEY SILT, trace subangular to subrounded gravel, yellowish brown to gray, wet, very stiff. 52.7-54.5 ft.: (SM), fine SILTY SAND, poorly graded, brown, with 1/16" gray clay stringers, loose. 54.5-55.4 ft.: (CL), sandy SILTY CLAY, trace subrounded gravel, brown to gray, dry, stiff to very stiff.			62.0-64.5 ft.: 1/2 bag of bentonite chips.	
990.0	<p>SANDY SILTY CLAY, fine to coarse, trace rounded to subrounded fine gravel, brown to gray, moist, very stiff.</p>		7	Sonic	0	12.5 / 12	55.4-55.5 ft.: (SM), SILTY SAND, poorly graded, brown, wet, loose. 55.5-67.0 ft.: (CL), SANDY SILTY CLAY, fine to coarse, trace rounded to subrounded fine gravel, brown to gray, moist, very stiff. Collected ATL sample 59.7-60.2 ft				64.5-73.0 ft.: 4 bags of #40 Red Flint Sand (50#/bag)
985.0			8	Sonic	0	6.8 / 6	67.0-70.0 ft.: (CL), SANDY SILTY CLAY, fine to coarse, trace rounded to subrounded fine gravel, brown to gray, moist, very stiff. 70.0-72.2 ft.: (SM), fine SILTY SAND, poorly graded, brown, wet, loose. 72.2-73.0 ft.: (SM), fine SILTY SAND, poorly graded, brown, with thinly laminated orange to brown clay stringers, wet, loose.				
980.0	<p>Fine SILTY SAND, poorly graded, brown, wet, loose.</p>										
975.0											

LITHOLOGY LEGEND



USCS Silt (ML)

USCS Poorly-graded Sand with Silt (SP-SM)



USCS Low to High Plasticity Clay (CL-CH)

USCS Clayey Sand (SC-SM)



USCS Low Plasticity Clay (CL)

USCS Silty Gravel

DRILLING COMPANY: Cascade Drilling
DRILLER: B. Beuning
GOLDER INSPECTOR: JSP

LOGGED BY: CJS
LOGGED BY DATE: 10/24/2013
CHECKED BY: JSP
CHECKED BY DATE: 10/30/2013



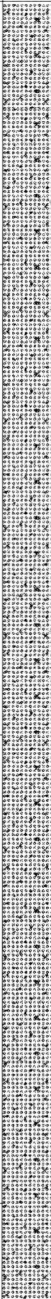
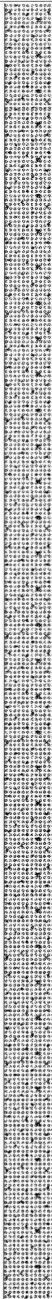
BOREHOLE LOG: MW-64

PAGE 1 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 40
DEPTH OF SOIL DRILL: 40
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473101.32 E: 4685852.25
GROUND SURFACE ELEV.: 1051.88
DATUM: N/A
START DATE/TIME: 9/19/2013 1:15:00 PM
END DATE/TIME: 9/21/2013 10:25:00 AM

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: GP24-300RS

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %				
1050.0	Fine to coarse SAND and SILT, organics (corn field), light brown to beige, moist, loose.		1	Sonic	0	5 / 5	0.0-1.7 ft.: (SM), fine to coarse SAND and SILT, organics (corn field), light brown to beige, moist, loose.			0.0-29.0 ft-bgs: Cement grout, 10-inch diameter borehole to 29 ft. Installed 6-inch diameter steel casing in a 10-inch diameter borehole to 29 ft bgs- grouted to surface and let set for >24 hours. Advanced 4-inch diameter boring through the steel casing and set a 2-inch PVC well to 38 ft-bgs. Well has 2.41 ft of stickup with bumper posts around the well.
	SILT, some sand, dark brown, dry, loose.	1.7-3.0 ft.: (ML), SILT, some sand, dark brown, dry, loose.								
	CLAYEY SILT, some fine to coarse gravel, brown with beige mottling, dry, stiff to very stiff.	3.0-4.5 ft.: (ML), CLAYEY SILT, some fine to coarse subangular gravel, light brown with brown mottling, dry, stiff to very stiff.								
1045.0	SILTY CLAY, some fine to coarse rounded gravel, light brown with brown mottling, wet, soft.					4.5-5.0 ft.: (ML), CLAYEY SILT, some fine to coarse gravel (larger than previous sample), brown with beige mottling, dry, stiff to very stiff.	5.0-14.7 ft.: (CL), SILTY CLAY, some fine to coarse rounded gravel (two bore hole sized pieces), light brown with brown mottling increasing with depth, wet, soft.			
			2	Sonic		9 / 9				
1040.0							0			
1035.0	SILTY CLAY and fine to coarse SAND, trace fine gravel, sub angular to sub rounded, gray with brown mottling, moist to wet, soft to stiff.						0			
			3	Sonic		9 / 9	14.7-23.0 ft.: (CL), SILTY CLAY and fine to coarse SAND, trace fine gravel, sub angular to sub rounded, gray with brown mottling, wet, soft to firm.			
1030.0							0			

LITHOLOGY LEGEND



USCS Silty Sand (SM)
USCS Low Plasticity Silty Clay (CL-ML)



USCS Silt (ML)



USCS Low Plasticity Clay (CL)

DRILLING COMPANY: Cascade Drilling
DRILLER: B. Beuning

GOLDER INSPECTOR: JSP

LOGGED BY: CJS
LOGGED BY DATE: 10/29/2013
CHECKED BY: JSP
CHECKED BY DATE: 11/4/2013



ELLECTROLUX JEFFERSON JEFFERSON LOGS.GPJ GOLDER NH 2011.GDT 12/2/13


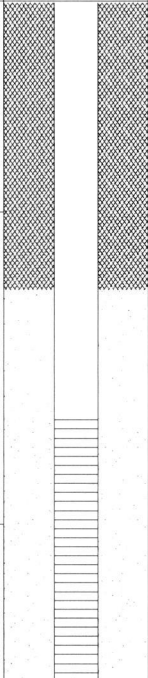

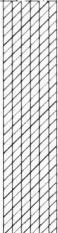
BOREHOLE LOG: MW-64

PAGE 2 of 2

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 40
DEPTH OF SOIL DRILL: 40
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473101.32 E: 4685852.25
GROUND SURFACE ELEV.: 1051.88
DATUM: N/A
START DATE/TIME: 9/19/2013 1:15:00 PM
END DATE/TIME: 9/21/2013 10:25:00 AM

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: GP24-300RS

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Alt. or Core Rec. %	Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1025.0	SILTY CLAY and fine to coarse SAND, trace fine gravel, sub angular to sub rounded, gray with brown mottling, moist to wet, soft to stiff.		4	Sonic	0	6 / 6	23.0-25.0 ft.: (CL), SILTY CLAY and fine to coarse SAND, trace fine gravel, sub angular to sub rounded, gray with brown mottling, wet, soft to firm. 25.0-29.0 ft.: (CL), SILTY CLAY, some fine sub-angular to sub-rounded gravel, gray, dryer than above, stiff.		25.0-30.5 ft.: 1 bag of bentonite chips.
1020.0	CLAYEY SILT and fine to coarse SAND, trace sub-rounded fine gravel, brown, moist, stiff to very stiff.		5	Sonic	0	6 / 6	29.0-33.2 ft.: (ML), CLAYEY SILT, some fine to coarse SAND, trace subrounded fine gravel, gray, moist, stiff. 33.2-35.5 ft.: (ML), CLAYEY SILT and fine to coarse SAND, trace sub-rounded fine gravel, brown, moist, stiff to very stiff.		Installed 6-inch diameter steel casing to 29 ft bgs. 90 gallons of grout (30 gallons used), 9 bags Portland Type I/II Cement and 1/3 bag Quick-gel Bentonite Powder (7 bags, 94#/bag) with 30 gallons of water.
1015.0	CLAYEY SILT, some fine to coarse sand, trace fine gravel, light brown, brown, gray and beige, wet, firm to very stiff.		6	Sonic	0	5 / 5	35.5-36.6 ft.: (ML-CL), CLAYEY SILT, some fine to coarse sand with light gray silty clay seams, brown to gray, wet, firm to stiff. 36.6-37.5 ft.: (ML-CL), CLAYEY SILT, some fine sub-rounded gravel, more gravel near bottom of sample, light brown to beige, moist, stiff. 37.5-40.0 ft.: (ML-CL), CLAYEY SILT to SILTY CLAY and fine to coarse sand, trace fine rounded gravel, moist, very stiff to hard.		30.5-40.0 ft.: 4.5 bags of #40 Red Flint Sand (94#/bag) 33.0-38.0 ft.: 2" diameter, 0.01"-slotted PVC pipe.
1010.0									
1005.0									

LITHOLOGY LEGEND



USCS Silty Sand (SM)
USCS Low Plasticity Silty Clay (CL-ML)



USCS Silt (ML)



USCS Low Plasticity Clay (CL)

DRILLING COMPANY: Cascade Drilling
DRILLER: B. Beuning
GOLDER INSPECTOR: JSP

LOGGED BY: CJS
LOGGED BY DATE: 10/29/2013
CHECKED BY: JSP
CHECKED BY DATE: 11/4/2013



ELLECTROLUX JEFFERSON JEFFERSON LOGS GPJ GOLDER NH 2011.GDT 12/2/13

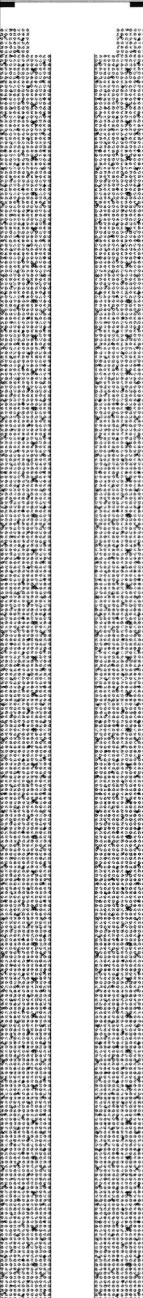
BOREHOLE LOG: MW-65

PAGE 1 of 3

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 74
DEPTH OF SOIL DRILL: 74
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473358.9 E: 4685730.21
GROUND SURFACE ELEV.: 1050.81
DATUM: N/A
START DATE/TIME: 9/16/2013 8:15:00 AM
END DATE/TIME: 9/20/2013 2:36:00 PM

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: GP24-300RS

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Soil Sample Description Or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)	Well Graphic	Well Construction Information
			Sample No. Or Run No.	Type	PID (ppm)	Soil Rec./Att. Or Core Rec. %				
1050.0								Used 17.25" diameter tricone bit to drill to 29 ft (mud rotary). See lithology from MW-47D.		8-inch steel flush mount casing. 0.5-1.0 ft.: Cement 0.0-29.0 ft-bgs: Cement grout, 17.25-inch diameter borehole to 29 ft set 12" diameter casing. 0.0-61.0 ft-bgs: Cement grout, 10-inch diameter borehole to 61 ft set 6" diameter casing. Installed 12-inch diameter steel casing in a 17.25-inch diameter borehole - grouted to surface and let set for >24 hours. Continued drilling with a 10-inch diameter borehole to 61 ft and installed 6-inch diameter steel casing - grouted to surface and let set for > 24 hours. Advanced 4-inch diameter boring through the steel casing and set a 2-inch PVC well to 73 ft-bgs.
1045.0										
1040.0										
1035.0										
1030.0										

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)

USCS Silty Sand (SM)



USCS Poorly-graded Sand with Silt (SP-SM)

USCS Silt (ML)



USCS Low Plasticity Silty Clay (CL-ML)

DRILLING COMPANY: Cascade Drilling
DRILLER: B. Beuning/ T. Schmalelft
GOLDER INSPECTOR: JSP

LOGGED BY: CJS
LOGGED BY DATE: 10/31/2013
CHECKED BY: JSP
CHECKED BY DATE: 11/4/2013



ELLECTROLUX JEFFERSON JEFFERSON LOGS GPJ GOLDER NH 2011.GDT 12/2/13

PAGE 2 of 3

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: GP24-300RS

ELECTROLUX JEFFERSON JEFFERSON LOGS.GPJ GOLDER NH 2011.GDT 12/2/13

USCS Low Plasticity Silty Clay (CL-ML)



Golder Associates


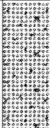

BOREHOLE LOG: MW-65

PAGE 3 of 3

PROJECT: Electrolux Jefferson
PROJECT NO.: 103-87305
HOLE DEPTH: 74
DEPTH OF SOIL DRILL: 74
DEPTH OF ROCK CORE:
AZIMUTH: N/A PLUNGE:-90

BOREHOLE LOCATION: Jefferson, IA
COORDINATES: N: 3473358.9 E: 4685730.21
GROUND SURFACE ELEV.: 1050.81
DATUM: N/A
START DATE/TIME: 9/16/2013 8:15:00 AM
END DATE/TIME: 9/20/2013 2:36:00 PM

DRILLING METHOD: Roto-Sonic
CORING METHOD: N/A
DRILL RIG: GP24-300RS

Depth Elev.	LITHOLOGY DESCRIPTION	Graphical Log	SAMPLE INFORMATION					Well Graphic	Well Construction Information
			Sample No. or Run No.	Type	PID (ppm)	Soil Rec./Att. or Core Rec. %	Soil Sample Description or Discontinuity Data (Depth, Dip, Angle From Core Axis, Type, and Surface Description)		
1000.0	CLAYEY SILT to SILTY CLAY, trace fine angular to sub-angular gravel, brownish gray, moist to dry, very stiff to hard.						49.2-49.5 ft.: (CL/ML), CLAYEY SILT to SILTY CLAY and fine to coarse SAND, trace fine sub-angular to sub-rounded gravel, brown, odor, moist, very stiff. 49.5-52.5 ft.: (CL), CLAYEY SILT to SILTY CLAY, trace fine angular to sub-angular gravel, brownish gray, dry, hard. 52.5-55.5 ft.: (CL), sandy SILTY CLAY, fine to coarse, some fine sub-angular gravel, dark gray, dry, hard.		
	Sandy SILTY CLAY, fine to coarse, trace fine sub-angular to sub-rounded gravel, dark gray to gray, moist to dry, very stiff to hard.				0				
995.0					0				
990.0			4	Sonic	0	7.5 / 6	55.0-57.0 ft.: (CL), sandy SILTY CLAY, fine to coarse, some fine sub-angular gravel, gray, moist, very stiff to hard. 57.0-61.0 ft.: (CL), sandy SILTY CLAY, fine to coarse, some fine sub-angular to sub-rounded gravel, gray with black mottling at 58 ft bgs, moist, very stiff to hard.		60.0-65.0 ft.: 1 bag of bentonite chips (50#/bag) Cement grout, 10-inch diameter borehole to 61 ft set 6" diameter casing.
985.0							61.0-70.9 ft.: (CL), sandy SILTY CLAY, fine to coarse, trace fine sub-angular to sub-rounded gravel, dark gray, very stiff to hard. Collected ATL sample 68-69 ft 70.9-71.6 ft.: (SP/SM), fine to coarse SILTY SAND, poorly graded, trace fine to coarse rounded gravel (quartz marble sized to green rounded rock approximately billiard sized ball), gray, wet, loose. 71.6-74.0 ft.: (CL), sandy SILTY CLAY, fine to coarse, some sub-rounded fine gravel, gray, dry to moist, very stiff.		65.0-74.0 ft.: 3.5 bags of #40 Red Flint Sand (94#/bag)
980.0	Fine to coarse SILTY SAND, poorly graded, trace fine to coarse rounded gravel, gray, wet, loose. Sandy SILTY CLAY, fine to coarse, some sub-rounded fine gravel, gray, dry to moist, very stiff.		5	Sonic		13.7 / 13			68.0-73.0 ft.: 2" diameter, 0.01"-slotted PVC pipe.

LITHOLOGY LEGEND



USCS Low Plasticity Clay (CL)
USCS Silty Sand (SM)



USCS Poorly-graded Sand with Silt (SP-SM)
USCS Silt (ML)



USCS Low Plasticity Silty Clay (CL-ML)

DRILLING COMPANY: Cascade Drilling
DRILLER: B. Beuning/ T. Schmalelft
GOLDER INSPECTOR: JSP

LOGGED BY: CJS
LOGGED BY DATE: 10/31/2013
CHECKED BY: JSP
CHECKED BY DATE: 11/4/2013



ELECTROLUX JEFFERSON LOGS GPJ GOLDER NH 12/2/13